



*The Portace, Mazon, child of Troy, who
presents his arms, his arts of war, &c. to
Paris, who is the cause of the Trojan War.*

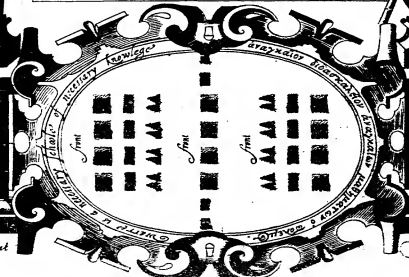
THE TACTIKS OF ÆLIAN L. 6. 1

Or art of embattailing an army
after y Grecian manner

*Engraved & Illustrated w figures throughout
& notes upon y Chapters of y ordinary
motions of y Phalange by J. B.*

*The exercise military of y English by y order
of that great Generall Maurice of
Nassau Prince of Orange &c
Governor & Generall of y
United Provinces is added*

*As also for Maurice's Laid & used to be fill at
his house at y house of y Duke of
in Dutch Church yard &c.*



General's design

Woudrichem in Hollandia



94 = 273



TO THE HIGH AND MIGHTY CHARLES, ONLY.

SONNE OF HIS MAIESTY, PRINCE OF
Wales, DUKE of Cornwall, Yorke, and Albany, MAR-
QVISE of Ormont, EARLE of Chester, and Roß,
LORD of Admanoch, and KNIGHT of the
most noble order of the Garter.



Ow much the *Gracians* excelled all o-
ther Nations in the Sciences called
Liberall, is better knowne in gene-
rall, then needfull at this time parti-
cularly to be rehearsed to your *Hig-
nesse*. The *Romans* themselves albeit
otherwise ambitious, and out of mea-
sure thirsty of honour, and challen-
ging to themselves the highest degree of grauity, constan-
cie, greatnesse of minde, wisdom, faith, and skill of war,
contended not herein, but freely left them the possession
of that praise vnquestioned. For warre it is not my pur-
pose at this time to make comparison, or commit the two
Nations together. The controuersie is already moied by
other, and hangeth vndecided in the Court of learning.
Thus much, me thinks, I may truly affirme, that the *Gra-
cians* were the first, that out of variety of actions, and long
experience reduced the knowledge of Armes into an *Arte*,
and gaue precepts for the orderly moving a *Bataile*, and
taught, that the moments of victory rested not in the

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hands

hands of multitudes, but in a few men rightly instructed to manage armes, and trained vp in the obseruation of the discipline of the field. In which regard they had almost in all Cities amongst them Masters of Armes, whom they called *Tatticks*, which deliuered the Arte Military to such, as were desirous to learne. Out of whose Schooles issued those chiefe of warre in number so many, in skill so exquisite, in valor so peerelesse, in all vertues befitting great Generals so admirable, that no Nation of *Europe* euen to this day hath been able to match, much lesse to ouer-match their fame, and glory. And the time was when the *Lacedemonians* exceeded the rest in Martiall skill, and were thought to be the best Souldiers of *Greece*; by means whereof they aduanced themselves to the Principality of *Greece*, which they held with such reputation, that an enemy by the space of 500 yeeres was not seene within their Territory. Till at last growing insolent, and surfeiting of, and being not able to brooke their owne fortune, they sought to oppresse, and with wrong and force to possesse the City of *Thebes*, and stirred vp *Epaminondas* a *Theban* by birth, and from his tender yeeres nourished by his fathers care in the study of Philosophy, and the science of Armes, to oppose against them, who in two battailes, the one at *Leuttra*, the other at *Mantineia* so broke their forces, that from that day forth they were neuer able to recover their wonted authority, and power in the field. *Philip* the sonne of *Amyntas* King of *Macedonia*, being but a private man, was deliuered as a hostage to the *Thebans*, & brought vp in the same house and learning with *Epaminondas*. He afterward became King of *Macedonia*; which being of it selfe but a poore kingdome, and before his time sometimes kept vnder by the *Athenians*, sometimes by the *Lacedemonians*, sometimes by the *Thebans*, & finding it at his entrance

to

to the Crowne harried, and spoiled by the *Pæonians*, and forced to pay tribute by the *Thlyrians*, by erecting a new arte, and discipline of warre, to which he exercised, and enured his *Macedonians*, he not only freed his Countrey from the Barbarous nations, but also ouercame the *Grecians*, accounted the only Masters of armes till that day, and caused himselfe to be declared Generall of *Greece* against the *Persians*: against whom after he had made his full preparation, he resolved to go in person. But being preuented by death, he left the succession of his kingdom, and execution of his designes to *Alexander* his sonne, whom he had before curiously instructed in the discipline of Armes inuented by himselfe. The same *Alexander* (being about 20 yeeres of age) after he had vanquished *Darius* in 2 great battailes in 12 yeeres ran through, and subiected the spacious, rich, and flourishing kingdomes of *Asia*, euen as far, as the *East Indies*, and with terror of armes made the whole world to tremble at his name. His kingdomes were after his death diuided amongst many Successors, who by the same Arte military easily maintained the possession of their conquests. This Arte is it, that I at this time present vnto your Highnesse. It was comprised in writing by many, and yet none of their works attained our age, but only that of *Ælian*, who hath in a small volume so expressed the arte, that nothing is more short, nothing more linked together in coherence of precepts, and yet distinguished with such variety, that all motions requisite, or to be vsed in a Battaile are fully expressed therein. *Ælian* liued in the time of *Adrian* the Emperour. How much the booke was of ancient time esteemed may appear by this alone, that *Leo* a succeeding Emperour setting downe Martiall instructions for the gouernment of his Empire, transcribeth whole passages out of *Ælian*, & whensoever he citeth, or nameth the *Tatticks*, he giueth still the first place vnto *Ælian*.

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Howbeit

Howbeit the practise of *Aelians* precepts hath long lien wrapped vp in darknes, & buried (as it were) in the ruines of time, vntill it was reuiued, & restored to light not long since in the vnited Prouinces of the low-Countries, which Countries at this day are the Schoole of war, whither the most Martiall spirits of *Europe* resort to lay downe the Apprentiship of their seruice in Armes, and it was reuiued by the direction of that Heroicall Prince *Maurice* of *Nassau*, Prince of *Orange*, Gouvernour, and Generall of the said Countries, a Prince borne and bred vp in Armes, and (beside the completeness of his other eminent vertues) for skill, experience, iudgement, and military literature comparable to the greatest Generals, that euer were. I haue of late aduentured to take from *Aelian* his *Greekish* cloake, and to put him in *English* apparel, that in that habit he might attend your Highnesse, and be ready with his seruice, in case he were thought worthy of employment. He had before for his Patron *Adrian*, an Emperour, and Ruler of the *Roman* world. Now he humbly craueth your HIGHNESSES fauour for his protection, who as in Princely descent, and succession of Royall blood you are farre superior, so in vertues worthy of your birth, and yeares, and in all hopefull expectations are you nothing inferior to *Adrian*. It may please your Highnesse to regard him with a gracious eye, and to esteeme the Presentor of him your faithfull bedesman, that will not cease to pray to the mighty God of hosts, to giue you conquest ouer all your enemies. From my Garrison at *Woudrichem* in *Holland* the 20. of September 1616.

Your Highnesse most humbly
dewoied,

IO: BINGHAM.



THE TACTICKS OF *AELIAN*
or art of embattailing an army after the
Grecian manner.



THE *Grecian* arte of embattailing an army (most mightie *Augustus Cesar Adrian*) the antiquitie whereof reacheth back to the age wherein *Homer* lyved, hath beene committed to writing by many, whose skill in the *Mathematicks* was not reputed equal with myne: whereby I was induced to thinke it possible for me soe to deliver the groundes therof, that posteritie should rather regard and esteeme my labors, then theirs, that before me haue handled the same argument. But weighing againe myn own ignorance (for I must confesse a truth) in that skill & practise of armes, which is now in esteeme among the *Romaines*, I was by feare withheld from reuiving a science half dead, as it were, and since the invention of that other by your auncestors, altogether out of request and vnregarded. Notwithstanding comming afterward to *Forme* to doe my dutie to the ¹ Emperour *Nerva* your maiesties father, It was my fortune to spend sometime with ² *Frontine* a man of Consular dignitie, and of great reputacion by reason of his experience

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in militarie affaires: and after conference with him perceiving he imparted no lesse studie to the *Grecian*, then to the *Romaine* discipline of armes I began not to despise that of the *Grecians*, conceiving that *Frontine* would not so much affect it, if hee thought it inferior to the *Romaine*. Having therefore in times past framed a project of this worke, but yet not daring then to publish it in regard of your majesties incomparable valour, and experience, which make you famous above all Generalls without exception, that ever were: I have of late taken it againe in hand, & finished it, being (if I deceaue not my self) a worke both worthy to be accompted of, & of sufficiency, especially with such as are studious of the arte, to obscure the credit of the auncient *Tacticks*. For in respect of the perspicuitie I dare bouldlie affirme, the reader shall more advantage himselfe by this little volume, then by all their writings: such is the order and methode, I have followed. Howbeit I durst scarcely offer it to your majestie who have bene Generall of so great warres, least happily it proue too too slender a present, & altogether unworthy of your sacred viewe. And yet if your majestie shall bee pleased to thinke of it, as of a *Greekish Theorie*, or a various discourse it may bee, it will give you some little delight, the rather because you may therein behold ⁴ *Alexander the Macedons* manner of marshalling his fields. And for that I am not ignorant of your majesties more weightie affaires, I have repared it into chapters, to the end you may without reading the booke in few wordes take the somme of that, which is to bee delivered, and without losse of time find the places you are desirous to peruse.

Notes.

Notes.

THE Tacticks] As *Taxis* in a general sence signifieth order, so *Tacticos* is as much, as pertaining to order: but specially taken, it signifieth pertaining to order of a battaile, or to the embattailing of an army. Here of the arte of embattailing an army is called *Tactice*, and hee, that is, skillfull, and experienced in that arte, *Tacticos* (^a *Vegetius* na. lib. 1. meth. hinc magistrum armorum) and the booke written of the arte, *Tactica*. And that this is the true signification of the word may appeare by *Xenophons Cyropædia*, where the arte *Tactick* is distinguished from the arte *Imperatory*, or arte of a Generall. Hee induceth *Cyrus*, in a discourse with his father speaking thus: ^b In the end you asked mee what my master taught mee, when hee professed to teach the arte *Imperatory*. And when I answered, the *Tacticks*, you smiled, and asked particularly, what the *Tacticks* availed without provision of things necessary to lue by: what without preservation of health? what without knowledge of arts invented for the vie of warre? what without obedience? so that you plainly shewed, that the *Tacticks* are but a small portion of the arte *Imperatory*, or of commanding an army. Thus *Xenophon*: making a difference between the arte *Imperatory*, & the arte *Tactick*. And in other place hee speaks heyes more particularly: ^c *Cyrus*, sayd hee, esteemed it not the duty of a *Tactick* to enlarge onely, or to stretch out in length, the front of his Phalange, or to draw it out in depth, or to reduce it from a wing to a Phalange, or to countermarche readily, the enemy shewing himselfe on the right, or left hand, or in the rear, but to divide it, when need is, & to place euery part for most advantage, & to leade it on speedily, when occasion is of prevention. Tet sometimes in a general signification books treating of the whole arte of warre are called *Tacticks*: as the Constitutions military of the Emperour *Leo* are entituled *Tactica Leonis*, perhaps of the best parte, because the arte of embattailing an army hath alwayes been esteemed the chiefeest point of skill in a Generall. Howbeit *Ælian* in his title of this booke taketh *Tactice* in the streight sense of signification: as appeareth by the definitions, he allegeth out of *Æneas* and *Polibius*: of whom the first defineth the arte *Tactick* to bee a science of warlike motion; whome also *Leo* agreeth the other, to bee a skill, whereby, a man taking a multitude serviceable, ordereth it into files, and bodies, and instructeth it sufficiently in all things appertaining to warre, which two definitions comprehend in few words the arguments of the whole booke. For first *Ælian* instructeth of levieng, & of arming men, then of filing, next of joining files, and making bodies, after of ordering the whole Phalange, or battaile, further of motions requirit to affront the enemy whersoever he groweth on, whether in front, flank, or reare; lastly of marching, and of the sondry formes of battailes carieng with them advantage of charging or repulsing the enemy in your marche. He, that will further understand the boundes of this arte, let him read in the 21. chapter of *Leo* the 58. section.

The Emperour *Nerva* your majesties Father] The Emperour *Nerva* here mentioned was not *Nerva Coccius*, whoe succeeded *Domitian*, but *Vipius Traianus*, who was also called *Nerva*, because he was adopted by *Nerva Coccius*, & succeeded in the Empire. And where *Ælian* termeth him *Adrians* father, indeed *Adrian* pretended, he was *Adrian* sonne by adoption. But *Dio* plainly denieth it. & *Spartian* saith, some report that hee was adopted by the faction of *Plotina* (*Traians* wife) by substituting one to speake with a faint voice, as if it had bene *Traian* upon his death-bed, whereas *Traian* was before departed this world. This is agreed, that he was *Cosin german*.

a *Vegetius* na. lib. 1.b *Xenophon* cyropædia lib. 1.c *Xenophon* cyropædia lib. 8 c. 27.d *Plutarchus* in *Philop.* cap. 3.f *Leo* cap. 1.g *Dio* & *Spartian* in *Vita* *Adrians*.

[illegible]

c Dio in v. 2
Nerv.

Frontine is reported by Tacitus to have overthrown the Silures in Britain. *Alian* in the next chapter calls him *Fronto*. Of one *Fronto*, that was Consul in the third year of that reign of *Traian*, I read in *Diome*: whose saying is reported to have been: That it was ill to haue an Emperour, vnder whose name so many might be made; but it was better any thing, but much more so, to haue an Emperour, vnder whom every man might doe some good. I lift. But this *Fronto* was not *Alian* *Fronto*. Hee was called so, because hee was *Frontinus*, that (that *Alian* saith) of *Iulius Frontine*. And yet it is no wonder that *Frontine* in *Latine* should be called *Fronto* in *Greek*, it being vsual for the *Gracians* to varie, and delect a little from the property of the *Latine* names.

d Spartian.in
vita Adriani.

3 Your majesties, of incomparable valor & experience. That this praise given *Adria* was not without cause, may appear by that, which *Aelius Spartianus* writes, *in the life of Adria*. His words be thus this meaning: After this, taking his journey into France, he was bountifull to all, as he faw cause. From thence hee passed into Germany, & being rather desirous of peace, then warre, yett hee exercised his souldiers, as though warre were at hand; teaching them to endure paines & hardnesse, himselfe giving an example of military life: gladly allowing Camp-fare, as namely lard, & cheefe, for meate; & water mingled with vinegar for drinke, in imitation of *Scipio Aemilianus*, & of *Metellus*, & of *Tran* the author of this preferment & rising, bestowing rewards vpon many, honors vpon some, to encourage them to bee such things, as seemed best to his commaundes. And furly it was hee next to *Cavaliere* the best military discipline (declining nowe through the remembrance of former Emperours) by ordering both the places of the Campe, & the payes, never suffering any man to absent himselfe from the Campe, but vpon iust cause: measuring the worth of Tribunes, not by favour of the souldiers, but by their owne desert, exacting, & exciting all the rest by example of his owne vertue, whilst hee often marched twenty miles on foote, being fully armed, broke downe banquetting howfes, and galleries, & vaults for coolnesse, & barbers, whereoever hee found them in the Campe, & was seene in a plaine garment fully: wore a baudricke not garnished with gold, butrons without gemmes; scarcely allowing an ivory handle to his sword; visited his sick souldiers in their lodgings, himselfe chose out the ground to encampe in: made noe Capitaine, but a man of a strong body, noe Tribune, but with a growne beard, or age, that by prudence, & yeares was able to sway the weight of the office, & not trusted him to take ought from the souldier; removed the souldiers, & laid softly to hand to their armes, and baggage. Hee had no consideration of the elder of souldiers, allowing none younger, there was befitting vertue; nor elder, then stood with the lawes of humilitie, to bee conversant in the Campe, con-

trary to old custom, and vſage : and gave himſelfe to hate particular knowledge of them all, and what their number was. Furthermore hee was careful to underſtand the controverſies betwixt ſouldier and ſouldier, and ſearched with great attentione into the revenues of the Provinces , to the end to ſupply , what was wanting ; endeavouring notwithstanding aboute all neither to buy, nor feede ought , that was not for vie . Wherefore when he had finiſhed his ſouldiers with his own expence, hee ſent ſome of his ſouldiers to ſurveye the ſpace of thirty miles, and hee ſent the firſt, that drew a wall along by the ſpace of eighty mile, wherewith hee divided the Romans from the barbarous people. *Heriſto Spartan. I have recited the hiſtory at large, becauſe I might repreſent the picture of an excellent Generall.*

4 Alexander in the Macedons manner. J That his booke comprehendeth the
Macedonian discipline of armes, I will leave hereafter, as particulars offer them-
selves. In the mean time let this suffice for an argument, that Adrian doubt-
eth not to ascribe it to Adrian, a Prince excellently learned in the Greeke
language; and as by reason of his skill he was able to discern, so by his autho-
ritie he would have censured so grosse an escape, if it had been otherwise, then
Adrian reports it.

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Chap.3.
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Of a *Phalange*: the length, and depth thereof, Of *Rankings*, and *phalanges*.
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CHAP. I.

How the Poet seemeth to bee the first, (at least we reade of) that had the skill of imbattailing an army, and that admired men indued with that knowledge, as appeareth by *Aneſtheus* of whom he writeth.

His like no living wight was found, nor any age did yeild,
 To Marshall Troopes of horse, or bandes of foote in bloudie field.

Concerning *Homers* discipline militarie, the workes of *Stratocles*, & of *Frontine* a man of Consular dignitie, in our time are to be read. *Æneas* perfected the Theorie thereof at large publishing many volumes of warfare, which were abridged by *Cyneus* the *Theſſalian*. Likewise *Pyrrius* the *Epirote* wrote *Tactics*, and his sonne *Alexander*, and *Clearchus*, and *Pausanias*, and *Euangelus*, & *Polibius* the *Megapolitan* (a man of great learning, *Scipios* companion) & *Xenophon*, and *Sphicrates*, *Polidamus* also the *Sioick* left forth the art of warre, & many other, some in Introductions, as *Brian*, some in large *Tactics* volumes. All which, I haue scene, and read, and yet thinke it not much to purpose to mention particulerlie, being not ignorant, that it hath bene the manner of those writers for the most parte, to applie their stile not to the ignorant, but to such as are already acquainted with the matters they intreat of; as for the impediments, which presented themselves to mee, when first I gaue my minde to the studie of this art, as namely neither to happen vpon sufficient Instructors, nor yet to find light, or perspicuitie enough in the precepts deliuered: I will endeavour, as much as I can, to remoue out of other mens way. And as often as wordes shall faile to expresse my meaning, I will for plainenes sake, vse the direction of figures, and pourtraicts, adioyning thereby the view of the eye, as an aide, and assistance, to the vnderstanding, & withall retaine the termes of ancient authors, to the end, that whoſoever shall follow this booke for an introduction, being therein exercised both to the same wordes, & also to the vse of things expressed in them, may grow as it were acquainted, and imagine himselfe no stranger, when he cometh to read their workes. By which waies by me preferred, I make no doubt, they will easely be vnderstood. Now that this art of all other is of most vse, may appeare by *Plato* in his booke of lawes where he saith: *That the Grecian Lawgiuers so contriued his Lawes, as if men were already prepared to fight. For all cities haue by nature vnproclaimed warre one against another.* Which being so: what discipline is more to bee esteemed, or more auaylable to mans life, then this of warre.

Notes.

IT seemeth by this Chapter, that the Authors, that haue of auncient time written Tacticks, haue bene many: and those not of such kinde of men, as haue giuen themselves to study, and contemplation alone, but of such, as besides their knowledge in good letters, haue bene actors in warre themselves, & (which is more) principall actors, some of them Generalls, other the next degree to generalls. Howbeit there is none here mentioned by *Ælian*, whose workes are extant. Whereby may be esteemed the inestimable losse, these last ages haue suffered in being deprived of such excellent monuments. I hope, I may so terme them without offence, though I haue not scene them. For what but excellent, can proceed from men of such excellencie in their profession, such as the most parte of those were. Yet, for some of them, I can say nothing, as finding little remembrance of them in auncient writers. Of this kind are *Eupolemus*, *Stratocles*, *Hermias*, *Clearchus*, *Pausanias*: albeit such names may often bee founde: They are specially mentioned, and much commended. Of whom I will sit downe, what I finde.

1 Frontine a man of Consular dignity [I haue before noted some what of Frontine. We haue of his, as it is thought, other workes, besides his stratagemes: But this booke of Tacticks, whereof *Ælian* speaketh, we haue not. I will onely adde the relation of *Verginius* touching Frontine, who writeth thus: Cato the elder, albeit hee had bene both invincible in armes, and often Generall of great armies, beleetued yet hee should more profit his Countrey, if hee laid downe in writing the discipline of warre. For valiant actes are but of one mans age, but things written for the profite of the state endure for ever. Many other haue done the like, but especially Frontine: whose industry herein was greatly approved by the Emperour Traian.

2 *Æneas* perfected the Theory. [*Æneas* is mentioned by *Polybius* in his ro. booke, where he discouers signs to be made by beacons of fire, in case an enemy approacheth to any parte of our Countrey. His booke were intituled Commentaries of the office of a Generall, as *Polybius* saith, & *Ælian* here calleth them books of the office of a Generall, the title being all one in effect. Of these booke none haue reached to our age, but one alone, which compriseth precepts of defending a towne besieged, & some s. or 6 years agoe came first to light, & print: that worthy man *Isaac Casaubon*, the learned ornament of his Countrey, (and of England so long, as hee liued there) being the sister forth. And it is adioyned to his edition of *Polybius*. These booke Tacticks of *Æneas* were abridged (as *Ælian* saith) by.

3. Cynæas the Thessalian [Plutarch in the life of *Pyrrhus* telleth us what Cynæas was. There was, saith hee, in the Court of *Pyrrhus* a Thessalian, a man of great vnderstanding: & whose having heard the orator Demosthenes, seemed alone of all, that then were esteemed eloquent, to renewe in the memory of the hearers an image & shadowe of the vehemencie & vigor of his vterance. *Pyrrhus* held him in his Court, and made vfe of him, in sending him in embassages to people and Cities. In which embassages hee confirmed the saying of Euripides.

What ever force can doe, with trenchant swordes:
The same, or more, is wrought by pleasing wordes.

Therefore was *Pyrrhus* wont to say, that Cynæas had gayned more Cities with his eloquence, then himselfe with armes. By occasion whereof he did him

him great honor, & employed him in his principall affaires. Tully speaketh of his workes: your letters, (saith he to *Papirius Pætus*) haue made me a great Generall: I was altogether ignorant of your so great skill in military matters. I see you haue read the booke of *Pyrrhus* & Cynæas. I therefore purpose to follow your counsell: this yet more, to haue some fewe shippes in a readinesse vpon the sea-coast. They say, there is noe better armour against Partian horsemen. But why sport wee? you knowe not, with what a Generall you haue to doe. I haue in this my government onely in practise expressed Xenophons institution of Cyrus: which before I had worne a peece with reading, *Pyrrhus* & Cynæas, hee nameth, as two principall Authors of warlike discipline. And where he addeth Xenophon, whose, though he be not named by *Ælian* amongst the Tactick writers, deserueth yet not to be pretermitted, having been both a great Comaunders, & besides writt Largely of military matters, whose workes also are now extant: let us see, what he saith of him in another place. Cyrus, saith he, is written by Xenophon not according to the truth of an history, but for a patterne of iust government. Whose wordous grauity is by that Philosopher matched with singular Certeintie, which booke our Africanus, (and that not without cause) was never wont to let goe out of his handes, And of Africanus he reporteth the like in his Tusculan questions.

4. *Pyrrhus* the Epireote wrote Tacticks. [Pyrrhus the King of Epirus was of auncient time esteemed one of the best generalls, that ever was. What Anniballs iudgement was of him Livy reporteth, & Plutarch in the life of *Pyrrhus*. And Antigonus being demanded, whom hee thought the greatest generall, then liuing, answered *Pyrrhus*. And where other Kings thought the greatest generall, the great in purple apparell in number of gardes alone imitated Alexander the great in exploits of armes, & in deedes of prowesse, saith Plutarch. Plutarch saith likewise: Touching his skill in the arte military howe to order a battaile, and howe to bring his men to fighte with most advantage, a man may draw prooffe sufficient out of the booke, he wrote of which booke Tully spake in the last paragraph.

5. And his sonne Alexander. [Pyrrhus had by his first wife Antigone a sonne called Ptolomey, by Lanassa, another called Alexander, & by Bircanna, the third named Helenus. All which albeit by race & inclination of nature they were Martial, yet brought he them vp, & from their birth framed & enured to armes. And the report is, when vpon a time one of them, yet a childe, asked him to which of them he would leaue his kingdom to: to him, answered *Pyrrhus*, who shall haue the sharpest sword: to Iustus also makes mention of these three. Ptolomey was slaine at Sparta, Iustus would haue it, Plutarch saith he was slaine in the way betwixt Sparta & Argos. Alexander reigned after his fathers decess, in the Realme of Epirus. That he wrote Tacticks, I haue not read, but in *Ælian* onely.

6. An Euanagelus [Plutarch discoursing of the studies of Philopemen hath this in effect: He took no delight to heare all kinde of discourses, nor to reade all booke of Philosophy, but such onely, as might profit to the daylie encrease of virtue, And hee read not willingly other passages of Homer, then such, as hee thought had some efficacy to moue a mans hart to prowes. But amongst, and above all other readings, he specially affected the Tacticks of Euanagelus: & like awhile the histories of the exploits of Alexander the great. This is a find of the Tacticks of Euanagelus: I gesse notwithstanding, he was a choice author, because Philopemen had him in such esteeme, of whom the same Plutarch writeth: That Greece bore him singular affection, as the last vertuous man, which shee brought forth

Glacio, epit.
Antic. lib. 9
cap. 17.

Epistol. Lad. Q.
lib. 1. cap. 1.

Tullius, quest.
lib. 1. cap. 1.

Livy, deced. 4.
lib. 27. c.
Plutarch, Pyrrhus.

Plutarch, in
Pyrrhus.

Plutarch, in
Pyrrhus.

Epistol. Lad. Q.
lib. 1. cap. 1.

Lib. 25. cap. 17.

Plutarch, in
Pyrrhus.

Epistol. Lad. Q.
lib. 1. cap. 1.

Plutarch, in
Pyrrhus.

Epistol. Lad. Q.
lib. 1. cap. 1.

Lib. 25. cap. 17.

Plutarch, in
Pyrrhus.

Epistol. Lad. Q.
lib. 1. cap. 1.

Lib. 25. cap. 17.

Plutarch, in
Pyrrhus.

fourth in her ould age, after so many great, and renowned Captaines of ancient time; and alwayes augmented his power, and authority, as his glory encreased. In which respect a Roman, praising him, called him the last Grecian; meaning that after him Greece bred noe great, nor any personage in deed worthy of her.

7 And Polybius. It is the same Polybius, whose History, so much as is extant, that excellent learned man Isaac Casaubon translated into Latin, and set forth 1609. For his life and worth refer to the preface of the same Casaubon to Polybius his history. Hee had beene in Achaia, his owne country, Generall of the horse. Afterward being in displeasure with the Romans, hee lived long in prison at Rome: and was for his worth finally released by intercession of the greatest men of Rome: and became companion to Scipio Africanus the younger, with whom also hee was at the siege and destruction of Carthage. His Tatticks, whereof Elian speaketh, are perished with other of his workes. Yet are there many passages dispersed heer, and there in his history, which argue his extraordinary skill in matters of warre. And it may seeme, that Elian hath taken much from him both for matter, and words.

8 Iphicrates. Whose will reade of Iphicrates, let him goe to ^a *Emilius Probus*, that writeth his life. His actes are also declared by Xenophon, and Diodorus Siculus, and Polyan, and Iustin, and diuers others, as they were incident to their generall histories. Hee was esteemed one of the best Generalls of his time; and was called out by name by Darius King of Persia to be generall of the Grecians, his mercenaries, in the warre, hee had against the Egyptians: His fame and estimation was so great with Alexander the great, that when his sonne (whose name was also Iphicrates) with other Grecians were taken prisoners by him, for that they came embassadors into Persia to Darius, hee not onely spared him for the loue of the City of Athens, and for the remembrance of his fathers glory (^b the wordes of Arrian) but held him about him in honour so long, as hee liued, and after his decesse sent his reliques to Athens, there to be interred by his friends, and kinsfolke.

9 Posidonius the Stoick. Posidonius in his time was a Philosopher of high renowne, and of the sect, that were called Stoicks. Tully citeth him often in his workes. In the second booke of Tusculan questions hee counteth, that Pompey the great, on a time comming to him, was desirous to heare him. But understanding hee was extreame fierce of the goue, hee forbore not notwithstanding to visit him being a most noble philosopher: whome after hee had seene, and saluted, and vsed with honorable wordes, and told him, hee was fory, hee could not heare him discourse, you may, if you please, quoth Posidonius: and I will not suffer paine to be cause, that so great a man seeke mee in vaine. Then, as hee lay in his bed, began hee gravely, and copiously, to dispute, that nothing was good, but that, which was honest. And when firebrands, as it were, of torment towched him to the quick amidst his disputation, hee broke forth often into these wordes: Sorrow, all this is nothing: *Tough though trouble me neuer so much, I will not yet confesse, that thou art of thy selfe evil. So Tully.* ^c *Pliny likewise telleth, that Pompey, after the warre of Mithridates, going into the howse of Posidonius, a man famous in Philosophy, forbid his seruants to knock at the doore (as the manner was), and the seruants bundles of frodde (saith he) were submitted to a doore by him, to whom East & West had submitted themselves. The same Tully attributeth to this Posidonius the invention of a Sphere, whose particular conuersions did worke the same in sonne & moone, and the other fixe planets, that is wrought by the motion of heauen euery day and night.*

The

The preparation of warlike forces and division of them, and how they are armed.

CHAP. II.

I will then beginne with such preparations as are absolutely necessary for service in warre, the forces whereof are of two sortes, the one Land forces, the other ship forces. Land forces are such, as fight on land: Ship forces such, as are ordered for fight in shippes vpon Sea, or Rivers. But the order of Sea service I will referre for another place, and in treat now of things pertaining to Land service. The levies then for Land service are either of those, that fight, and mannage Armes, or else of those that fight not, but remaine in the campe for necessary vses. They fight that stand ordered in battaile, and with armes [assault or] repulse the enemy. The rest fight not, as Phisitians, merchants, servants, and other, which follow the campe to minister vnto it. Such as fight, are either footemen, or Riders: footemen properly, that serue on foote. Of Riders, some vse Horses some Elephants. They, that vse Horses, are caryed either one Horse-back, or elle in Chariots. And these are the differences in generall. But in speciall the foote, and Horse receaue many other diuisions; onely the Elephants, and Chariots, neuer varie. Footemen then are reparted into three kindes, one being Armed, another Targetters, the third light, or naked. The Armed beare the heaviest furniture of all footemen vsing according to the Macedonian manner large, round, Targetts, and long Pike: The Light contrarywise beare the lightest, having neither Curace, nor Greue, nor long, or round Targetts of any weight, but such weapons onelies as Arrowes, Darts, Stones either for hand, or sling. To this kind is referred the armour of the Argilos, who hath his furniture like to the Macedonian, but something lighter. For hee carrieth a little slight Targett, and his Pike is much shorter, then the Macedonian Pike: which manner of arming seemeth a meane betwixt the light, or naked, and that which is properly called heauie: as being lighter, then the heauie, and heavier, then the light: and that is the cause, that many place it amongst the light.

The forces of Horse (which wee distinguished before from Chariots) as being ordered in Troopes, are either Cataphracts, or not Cataphracts. They are Cataphracts, that cover their owne, and their horses bodies all over with armour. Of not Cataphracts, some are Lancers, some Acrobolists. Lancers are such as joyne with the enemy, and fight hand to hand with the Lancer on horseback. Of these, some beare long Targetts, and are therevpon called Targetters: Other some Launce alone without Targetts, who are properly called Lancers, and of some Xestophori. Acrobolists on horseback are such as fight a farre off with sling weapons. Of these, some vse darts, some bowes. They vse darts, whome wee call Tarentines. Of Tarentines, there are two sortes: for some throw little darts a farre off, and are termed Darters on horseback, but propellie Tarentines, others vse light darts, and after they haue spent one or two, close presently with the enemy like the Lancers, which

wee

^a *Emilius Probus* in vita Iphicratis. Xenophon. Hystor. grecic. lib. 6. ^b *Arrian* lib. 1. ^c *Pliny* lib. 7. ^d *Cicero* de natura deorum lib. 2. ^e *Cicero* de natura deorum lib. 2.

^b *Arrian* lib. 1. ^c *Pliny* lib. 7. ^d *Cicero* de natura deorum lib. 2. ^e *Cicero* de natura deorum lib. 2.

^c *Tullius* quæstio. lib. 2. ^d *Cicero* de natura deorum lib. 2.

^d *Pliny* natural. hist. lib. 7. ^e *Cicero* de natura deorum lib. 2.

^e *Cicero* de natura deorum lib. 2. ^f *Cicero* de natura deorum lib. 2.

The Tactics

wee spake of, and fight hand to hand. These in common speech are named light horsemen. So that of Tarentines some are properly called Tarentines, whose manner is to dart a far of Some light horsemen, who joyned, and fight hand to hand. ²⁰ The horsemen that use bowes are termed Archers on Horseback, and of some Scythians.

These then are the differences of such as are in the Campe, the kinds of Souldiers being in number nyne: Of footmen, armed, Targetiers, Light armed, unarmed: Of Horsemen Lanciers, Darters, Archers, Cataphracts: And lastlie Chariots, and Elephants.

Notes.

IN this Chapter the kinds of Souldiers are distinguished according to their severall armes borne in fight. And therefore of foote some are called armed, because they beare heavy armes, other light armed or naked, because they weare no defensive armes, other some Targetiers, because their chief defence rested in a slight target, wherewith they covered their bodies: The horse also have their appellation, as their armes are. And some are Cataphracts, because themselves & horses were armed completely, other Lanciers, for that they used a lance: other some Acrobolists, by reason they fought with stinging weapons a farre off. The first thoughts of a Prince, or State, that is resolved to put an army into the field, ought to be to provide armes. Armes are the security of their own souldiers, the terror of the enemy, the assured ordinary meane of victory. The antiquity of armes is alone with the beginning of warre. For when of ancient time mighty men puffed up with pride, and led by ambition, fought by violence to enlarge their empire, and to bring under subjection their bordering neighbours, they were enforced to flye to the invention of armes, without which noe victory could be obtained. Since, armes have been taken up for defence also, necessity, the mother of arts, inventing a meane to withstand ambition. As Antalcidas well observed to Agesilaus being wounded by the Thebans, you are well rewarded for your labour, quoth he, since you would needes teache the Thebans to fight, that had neither will, nor skill so to doe. For the Thebans being put to necessity of defence grew warlike through many invasions of the Lacedemonians, saith

a Plutarch, in A-
gellian.
b Euseb. natural
histor. lib. 7. c. 56.

c Plutarch, in A-
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part of a fouldiers body, being so fildy made & borne, that need requiring, they could throw down their burdens, & vfe their ready armes in fight, as the members of their bodies. *It must care be had, that their weight exceed not the strength of him, that beareth them. For vther will be able to continue long in fight, than beside the labour of fight, is charged with a burden more, then he can well beare? The prooffe is plain in beasts, which how strong soever they be, faint & tire vnder too much weight. A *Asian* offers, asking of the length of pikes, giueth this rule, that they bee not longer then a man may well vfe, & wield in handling. To much length maketh them too heavy, & vnsuited to be managed, whereby they rest vnprofitable to offend the enemy. In this property of fustitie those armes & weapons are comprehended, which are of most vfe in the field. For as in all other artes things of greatest effect are alwayes preferred so is it in warre. There is great advantage in armes, which is the cause that one kinde hath been preferred before another. *Amilius Probus* giueth a notable testimony of skill in matters of warre to *Iphicrates*, of whom he writeth thus. *Iphicrates* the Athenian invented many things in warre. Hee chaunged the armes of the toore: For whereas before they vied great targets, short pikes, & little swordes, he gaue them little round targets, called *Pelta*, that they might be fitter for motions, & encounters, and doubled the life of their pikes, & made their swordes longer. Hee likewise chaunged their *Curaces*, & in steed of iron, & brasse, brought in other wrought of linen, whereby he made them nimble at all assaies. For lessening the weight, hee brought to passe, that they as much covered the body, and yet were very light, and fitter for vfe. Of these targets, which *Iphicrates* invented, the names of *Peltari* (Targets) sprong: of whom wee shall heare more in this chapter. And yet wee must not herer conclude that *Iphicrates* chaunged all the armed foote into Targets; for the Athenians had still their armed, notwithstanding this invention of Targets; as *Xenophon* testifieth, but where as the Athenians before had noe targets of their owne people, (as I coniecture) *Iphicrates* brought in this kind of armour: and so of the armed, he made some targets, & left the rest to the armes, they bore before: iudging it more profitable to haue both Targets, & Armed of their owne people, then armed alone. *Philomen* also the brave *Achaean* Generall taught his Countrymen in steed of longe targets & Targetes to take around target (called *Alpis*) & a pike after the Macedonian manner, and to arme themselves with head-pieces, *Curaces*, & greues, and to sett themselves to a stand, and firme kind of fight, in lieu of confusion, and pestilicall encounters, and by this means brought the to be victorious. *Polys*, discourses of the *Caracoli* & Spanish swordes of ancient time, saith, that the *Gauls* sword was so fashioned, that it serued onely to strike with, and but for one stroke: after which it so bowed both in length & breadth, that vnesse the point were rested vpon the ground, & the blade rightened, you could not strike with it the second time. But the Spanish sword was both for thrust & stroke, having a strong point, & a fustie & sure edge to strike withal on either side by reason of the firmnesse of the blade. This difference the *Romans* espied, and being excellent imitators of all things, which were best for vfe (though they were enemies from whom they tooke them,) made choice of the Spanish swordes, & after *Annibals* time caused their foote to fence wih: *Sulius* witnesseth thus. The Spaniards, saith he, in forme of swordes farre excell all other nations. For their swordes both haue a strong point, and an edge on either side, that entrench deep in striking. Which caused the *Romans*, to lay down their owne country swordes, and take the Spanish forme from them, that followed *Anniball*. The forme they tooke, but the goodnesse of the metall, & exactnesse of the temper*

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they could never attein vnto. The *Romans* then rejected the french swordes, as of *small* use, & imitated the Spanish, because they were fitter for service. *Xenophon* describing the nations, which followed *Craesus* against *Cyrus*, their manner of arming, and order in battails, telleth of the *Egyptians*, that they were armed with targets reaching down to their foot, with long pikes, & with swordes, which they call *Copides*, & for order, stood a hand-bred in depth, & bringeth in *Cyrus* deriding this manner of arming, and order, to his souldiers, saying they were like armed, like imbratuled. For their targets, said he, are greater then is fite for action, & for fight, & being ranged a hundred deep, it is vnusfitt, they will hinder one another in fight, except a few. *Anniball*, after his first victory against the *Romans*, armd his *Africans*, (but best & most trusty souldiers) with the armour of the *stunne* *Romans*, because he found it better, then his owne, & *Pyrrhus* used not only the armour, but the Italian souldiers also, & ranged at them a cohort & a *Merarchy*, after natively one by another. And *Mythridates* after his experience in his first wars with the *Romans*, that well in arming, as in manner of fight, they excelled all other nations, left the arming of his owne Country, & brought in the Roman sword & target, & reduced all as mere, as hee could vnto their discipline. So then strength & fusticall are required in armes. To this we comelinsse adioyned. The shield of *Achilles* how was it bewtified with pictures & Stories by *Vulcan*; and that of *Aeneas*, coming out of the same forge, how glorious was it: To say nothing of the brave armes of *Heclor*, *Agamemnon*, *Diomedes*, *Glancus*, *Turmus*, *Mezentius*, & other. *Alexanders* armes were very rich. He had a Sicilian Carbeck cyrved vpon a double linen *Curace* the spoile of *Ilios*; his headpiece was of iron, lining like pure silver, the work of *Theophilus*, about his necke was an iron gorget beset with precious stones. A sword hee had of wonderful temper & lightnesse, the gift of the Citeian King. Hee wore a baudricke of prowder worke, then the rest of his armour, the work of the elder *Elicon*, & the honour of the Rhodian City. *Cyrus* the elder, that liued before *Alex*, time, had armes provided by his Grandfather *Affages*, both very faire, & fitt for his body. *Abrazates* the *Sufian* king had his headpiece of gold, & vambraces, and bracelets about his wrists, & a purple Coate, and a plume of hyacinthine feathers. Neither did this bravery rest amongst the Princes alone. The souldiers of *Cyrus* were furnished with the same armes, that *Cyrus* himselfe bore, with scarlet coates, *Curaces* of brasse, brasse helmets, white plumes, swordes, & eury one a darte. They differed onely in this that their armes were guiled, *Cyrus* his armes shined, & had a reflexion, as it were, a looking glasse. And *Alexander*, hearing of the riche armour, the *Indians* bore, to make his owne souldiers equall with the in bravery, whom they exceeded in valor, caused they targets to be plated over with silver (whereof they were after called *Argaspides*) & their horse-bittes to be made of gold, & adorned their *Curaces*, plume with silver, other with gold. This might seeme pompe & superfluitie in a young King, were it not that the like was done by other the greatest Generals of ancient time; *Cyfar* may serue for an example for al, whose souldiers how gallant and brave they were, *Plutarch* testifieth to his life. The *Romans* otherwise much addicted to frugality, allowed yet liberally ornaments to the honouring of worthy souldiers, rewarding them for their service, with rich trappings for horses, chaines of gold, bracelets, crownes of gold & other honors, which they wore on onely in the field, but at other solemnities & meetings in the City. And for every common souldier they provided plumes of purple, or blacke feathers, every one of a cubit long. Of which plumes *Polys* giueth this iudgement: Plumes, saith hee, being added to the rest of the armour maketh a souldier seeme twice as great, as hee is; and beside the faire shewe, they make, they are terrible to the enemy in fight. A man may seeme as light, as a feather, that discourses of plumes, & fetcheb ornaments from feathers.

a *Xenophon* Cyrop. lib. 1. c. 10. Copides were five cubits long, binding at the point, like the fustian Curtis. lib. 2. c. 5.b *Polys* lib. 12. c. 7. c. 7. c. 7.c *Plutarch* in *La* *collo*d *Plutarch* Alex.e *Xenophon* Cyrop. lib. 1. c. 10.f *Xenophon* Cyrop. lib. 2. c. 5.g *Xenophon* Cyrop. lib. 2. c. 5.h *Carrus* lib. 8. c. 10.i *Plutarch* in *Caesar*.k *Plinius* lib. 8. c. 10. c. 10. c. 10.l *Polys* lib. 12. c. 7. c. 7. c. 7.

It may I truly affirme, that the use of plumes is very ancient, & that the Romans borrowed it from the Grecians, and the Grecians from the Carians, who were the first inventors of them. As much is testified by Polyenus: He saith that Temestus King of Egypt going to the oracle of Ammon about the state of his kingdom, had answer to beware & take heed of Cocks. Pammenichus, that fought the kingdom, had Pigeons a Carian to one of his familiar friends, & learning of him, that the Carians were the first that used Plumes to their helmets, & evill then continued the use of them. & considering that the meaning of the Oracle was not of cocks, but of men, that wearing some ornament on their heads, had a resemblance of Cocks, raised a multitude of Carians against Temestus, by whose help he overthrew Temestus in battaile, & possessed himself of the crown of Egypt. Now for the use and of souldiers ornaments I will only add one example. Philopomen the Achaean in reforming the abuses crept into the Achaean State with great judgement (I will use the words of Plutarch,) reduced to order their delicacies & superfluities. It was not possible quite to take away the sickness of vain & idle desires, wherewith they had of long time been possessed, delighting in excess of apparail, in riche dyes of coverlets, & carpets, striving one with another, who should be most sumptuous in bankets & feasting. But by little & little beginning to turne their thoughts from vnnecessary expences to a loue of comelineffe in thinges, that were profitable & honest, he brought them at last to leaue the expences of the body, & to shew themselves gallant, & braue, in soldiery, & warlike furniture. A man might therefore haue seene the shoppes full of silver and golden cuppes cutte a pieces, of cuiraces gilded with gold, of silvered targets, and bittes; the places of exercise fraught with colts then first backed for service, & with yong gallants managing their armes, & in the hands of women head-pieces adorned with divers-coloured trynnings, horsemens coates, and souldiers cloakes curiously embellished with flowers. For the very sight of these things both encreaseth Spirit, & stirreth up desire, & engendreth an vndanted boldnesse, and alacrity to dangers. In other shewes to much lavishing bringeth in effeminateesse, & worketh a remissnesse of minde, the sence with vaine pleadings and ticklings subverting, as it were, the vigor and force of the vnderstanding. But in these the Spirits are much heighthened, and exalted. As Homer bringeth in Achilles at the very sight of his newe armour ravished and inflamed with a desire to bee doing with it. Thus garnishing the youth hee exercised & hardened them to labour and warlike motions, making them thereby to vndergoe with desire whatsoever they were commaunded. So farre Plutarch. Out of whose opinion it followeth, that Bravery of armes raiseth the spirits, stirreth up desire to fight, maketh the souldier bold, and cherefull to perils, and as Polybius holdeth pleaseth the fight, encreaseth stature in shewe, and is a terror to the enemy. Yet ought there therein a meane to be sought, & rather an assurance followed, than vaine gazing and ostentation. Antiochus being to fight with the Romans gathered a mighty army together. And seeing them glitter with gold and silver, and with all excess of bravery, as be manner of the Asiaticall people was, took so great delight therein himself, that calling Anniball unto him, hee beheld his troopes, and demanded, if hee thought not that Army sufficient for the Romans: yes quoth Anniball, though they were the most covetous people in the world. Anniball with good reason derided the vaine shewe sifter for a smale, then a field, which hee assured himselfe, would fall into the Romans hands to be spoiled. Attributades committed the like error in his first warre against the Romans. For as Sophistres are wont for the most parte, saith Plutarch, hee was in the beginning vaine glorious, and conceited by provide warring against the Romans with weake forces, but yet sette out with pompe, and bravery

a Pharaoh in
Exod. 10.

a Herod. 11. 14.
b Polyen. 1. 7. in
plumetibus.

c Plin in Philom.
Polybius 1. 1. 10.

bravery to the outward view: But being foiled to his shame, and weighing in his minde, he must take vp second armes against them, he fought to reduce his forces to a true kinde of arming, & fitt for the service, he intended. Reiecting therefore multitudes, and confuted threatnings of barbarians, and furnitures of armes gilded, and sette with precious stones, as being a pray for the conqueror, and noe assurance for him, that wears them, hee brought in the Romanwards, and caused long heavy targets to bee framed, and choise horses, rather than what were already managed, and made fitt for service, then those, that were richly trapped and garnished. So farre Plutarch. The souldiers care therefore ought to bee first for surenesse, then for himselfe, lastly for comelineffe and ornament in armes. If the two first fail, the last availeth little, and will prove rather a burden, then a defence. And thus much of armes in generall: Nowe followe the particulars of armes, as they are in Aelian.

1 Preparations absolutely necessary for warre] The preparations, whereof Aelian speaketh, are so necessary, that without them noe warre can be made or continued. For purposing to fight by water you must have shippes, by land, you must have foote, and horse. For which, if you provide noe armes, you put them into the field not to fight, but to bee slaughtered. The manner of fight in the field is not of one sort. Some time celerity is needfull, to attempt or prevent the enemy: sometime a slowe and sure proceeding, left, with too much hast, wee be overtaken our selves. Therefore the divers arming of souldiers, ought to be such, that they may serve for all occasions, and uses, and that wee may employ always to service such, as by reason of their armour, shall most fitt our purpose. Wherefore Iaphigates justly resembled an army to a mans body, calling the heavy armed the body, the light-armed the hands, the horse the feete, and the Generall the head: and as if any of the rest were wanting, the army should bee lame, and halting. So if there want a Generall, it is unprofitable, and of noe use. The heavy armed are the body, which give life and foode, as it were, to the rest, and to which the rest being distressed, retire. The light armed are the hands, which upon every occasion being put out to grype and take hold upon the enemy, are drawn in againe, when it is expedient. The horse, as feet move with celerity: the Generall is the head, that ruleth, that watcheth, that careth for the rest, directeth the times of their motion, and of their rest. So then the whole force of the field consisteth of horse, and foote. And the foote are reparted into three kinds.

1 Armed, Targetiers and light-armed] These severall kinds of souldiers were of divers all the Grecians, especially by the Athenians, Lacedamonians, and Thebans, whereof were the mightiest, and the most warlike people of Greece. Alexander had them in his army against Darius. When Alexander, saith Arrian, came to the place, where Cyrus (with whom Xenophon was) encamped, and sawe the streights of Cilicia possided with a strong garrd, hee left Parmenio with the heavy-armed, to stay behind, himselfe about the first watch taking with him the Hypaspistes, archiers, and Agrians, marched on toward the streights in the night. The archiers were left with Parmenio, himselfe took with him the Hypaspistes targetiers, archiers, and Agrians: These Agrians were divers on foote. The like is to be found in divers other places of Arrian. Pyrrhus also, that followed the Macedonian king in arming his souldiers, had the same division of armes. And Philip King of Macedony sonne of Demetrius. And Antiochus, that warred against the Romans.

2 The armed beare the heaviest furniture] This heavy furniture appeareth not by description of the armes, which Aelian giveth them: which are a Macedonian target,

B 4

a Plutarch in De
corde. Plutarch 1.
in Teleus. 6. 23
1. 10. 11. 12.

b Thucyd. lib. 2.
1. 1. 2. 3.

c Arrian. 1. 1. 12.

d Arrian. 1. 1. 10.

e Plutarch in
Pyrrho. 1. 1. 11.

f Arrian in Syn-
tax. 1. 1. 13.

a Accutia Bo-
ne in vna 12th
etac.

a Xenoph. Cy-
lib 7 p 28 A
b Xenoph. Cy-
lib 7 p 28 A
c Xenoph. Cy-
lib 7 p 28 A

d Xenoph. Cy-
lib 7 p 28 A
e Xenoph. Cy-
lib 7 p 28 A

Gy. 6. endora.

d Xenoph. Cy-
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e Xenoph. Cy-
lib 7 p 28 A

f Xenoph. Cy-
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w Xenoph. Cy-
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target, and a pike onely. Iphicrates, besides the target (lesse, then the Macedonian target) which he armed his Targetter withall, gave him both a pike & a linen curace. So that if the Macedonian armed bore not more then a Target and a pike, his armes should be lighter, then Iphicrates his Targetter, who had a target, a pike, & a linen Curace. It hath been the manner of some Nations to beare targets alone without Curaces. So did the Egyptians in Xenophon: So the Gauls in Pausanias. There are againe, that have borne Curaces without Targets: as Phorcyus the Phrygian in Homer: of which kinde of Curace, because it some what resembleth the Curace of our time, I will reherse the description out of Pausanias. There lay vpon the aulster, faith hee, a brasse Curace, the forme whereof agreeth now with the vse of our times, but of old it was common. It had two plates of brasse, one fitt to the breast and the belly, the other to cover the backe. That before, was called *gyalon* (the hollow part) that behynd *Prasagon* (because it was added to the other.) They were fastened together with buttons behinde. It seemeth to bee a sufficient defence for a mans body without a Target. Therefore Homer maketh Phorcyus the Phrygian to fight without a target, because he wore such a Curace. But yet, that it was not the manner of the Macedonian armed to beare pike & target alone, may be plaine many wayes. First polyen cineth them headpieces, greues, and targets, and pikes. Then doubt I not but they were as well armed as the rest of the Gracians, within whose Panoplia Curaces were comprehend'd as S. Paule testifieth reckoning as parcels of the Panoplia, a Curace, a target, & a headpiece. Now that the Macedonians had also their Panoplia full or compleate arming, is to be found in Diodes Siculus. Where also Chorasus the Macedonian (whom Curtius calleth Horatus) is said in the fight betwixt him & Dioxippus to be fully armed. Leo describeth the Panoplia of the Macedonians after this manner. Alexander, faith hee, armed his Macedonians with a large target, a sword, a head piece, greues, vambraces, and a long pike. Philopamen (as is before reherced) reducing his Achaeans to the Macedonian arming, brought them to Curaces, headpieces & greues. Plutarch calleth them Pephagmenos, & Cataphratos: at having these bodies all armed & opposeth alleth them Fincois, light or naked: And by Vegetius, the armour is self named Cataphratis, because the whole body is covered therewith. Xenophon termeth them Thoracophoros (wearing Curaces.) These are the strength of the battaile, and a strong wall, or rather a fortress of the field, to whom the light-armed, and the horse also retire in time of need. As long as they stand the field is not lost, being defeated the rest can make no resistance. Being armed with a single target without other armes, they incur the same danger, thut the Romans in Gracians time did, whoe for want of Curaces were entirely destroyed with the arrows of the Catibres. Wherefore, it seemeth, a lian heer pointeth at the principall armes onely of the armed Macedonian, For after ward dislouing of the light-armed, he faith, they neither had Curace, nor greue, nor long or round target: implieng thereby, that the armed had them all. So Livy, comparing the armes of the Romans and Macedonians together, faith not more, then, that the Macedonians were armed with a round target and a pike, the Romans with a long target, and a dart, called Pilum; when himself had before declared, they had headpieces, Curaces, and greues.

3 Vnto targets after the Macedonian manner. Targets were of two sortes, round targets, and long targets. Long targets were called Thuroco, and were in forme like a dart, from whence they had their name. For Thura signifieth a dart. These the Romans, and Gauls used, albeit some what different in forme. The round had eight full handfull in diameter, as a lian faith, and were termed Asides. Long targets were much disliked by the Gracians. Cyrus in Xenophon derideth them as

as both hindring the sight, & being conuieled; and Philopamen changed them into round targets following the Macedonian manner. The targets of Philopamen Pausanias termeth Argelian targets: It may be because they were first used by the Argians in the battaile betwixt Acrisius Danais father, and Perseus, who contended about the kingdom of Argos.

Of what matter these targets were, is a question. Some take them to have been made of other matter, & covered over with brasse: & that otherwise the souldier should not have been able to beare born the weight. I deny not, that in ancient time some targets were plated with brasse: the rather, because I find, that Alexander to match the Indian pompe covered the targets of his souldiers with plates of silver. But, that the ordinary Macedonian target was so covered, I deny. Aelian after calleth them chalice (brasse) not epichalce (covered with brasse.) Polybius faith, that the Macedonians in the time of P. Philip the sonne of Demetrius were called Chalcaspides (brasse targetters) not epichalcitai, in which name, as Hespichus hath, they were called, that had their targets covered with brasse. So likewise in the time of Perseus. And the Macedonians, whoe imitated the Macedonian manner of arming, are termed Chalcaspides in Polybius: I haue shewed, that the Lacedemonians had brasse targets by the institution of Lycurgus: & that in the time of the Herodes almost all armour was made of brasse. The targets of the Lacedemonians that were fitt at the battaile of Leuctra were brasse, and to be seene in the time of Pausanias; and the brasse target of Pyrrhus, which he left at Argos, being there slaine, was kept in the temple of Ceres. As for the weight, it is not so great but it may become light enough by vse, and exercis. Wee see iron targets in use at this day, and not hard to be borne. And albeit the weight bee not for every mans strength, yet since it hath bene, and is, the manner to make choice of souldiers, and to fitt them with armes according to the ability of their bodies, I see no reason, but the stronger sort might well beare them. Another sort of targets there was which differed from the Macedonian not so much in forme of roundnesse, as in matter and manner of carrying. They were made of wicker, and borne in the left hand as our bucklers, which wee used not long since, and some covered over with hides some not. Xenophon faith, that Cyrus the elder armed the Persians with these wicker targets: & relating of the nations, through whose Countries the Gracians passed in their returne out of Persia, & describing their armes, reporteth that the Chalybs, Turchi, & Phasians had targets of this kinde. Now, that they were borne in the left hand, is clear by the same Xenophon. After writeth thus of the fight betwixt Cyrus & Cræsus: The Egyptians & Persians encountering together, the fight was hard, & sharpe: & the Egyptians awed in number as in armes, had the advantage. For they fought with stiffe, long pikes, & theie large targets better covered their bodies, then Curaces, or wicker targets, and being borne on their shoulders auailed to joint thrusting forward. Seeing therefore their targets close, they advanced, & ranne on. The Persians were not able to endure the shock, by reason they bore their wicker targets at the armes end, but retiring by litle, & litle & giving, & taking blows, they maintained the fight till they came to the Engines. So saith Xenophon. Out of which words a man may plainly vnderstand the manner of beauiug these wicker targets, which by reason of lightnesse might easily bee held out at armes end. And as the Egyptian target, which reached downe to the foote, must needs be heauy, and therefore had need of the shoulder to support it, so was it with the brasse targets of the Macedonians, which were also weighty, by reason of the matter, they were made of. These therefore were likewise carried on the shoulder. Plutarch witnesseth in the life of Aemilius. And the same Plutarch reherceth that Cleomenes the King of Sparta taught his Lacedemonians, in Steele of a speare, to use a pike with both handes, and to beare their targets

a Polyen. li. 4 in
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b Pausan. in Ar-
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5 The light.] They had divers names given them in the Greek history. Some times they are called Euzoni, because they so girded up their apparell about the shat they were light and fit for motion. Sometimes Askueoi, because they bare no military furniture of defence. Sometimes Elaphoi because they resemble (as some think) a hare in lightnesse, and swiftnesse. Sometimes Gynnietæ (naked) because they were without defensive armes. Sometimes Pylloi (naked or light) as they are beere termed by *Ælian*, and by *Appian*, and the other, that cited.

6 Flying weapons only.] The light-armed are divided into three kinds, Archers, Darters, and Slingers. Which three kinds were of much use amongst the Græcians, and they beere only flying weapons. *Æ* Xenophon testifieth that *Cyrus the elder* had them. *Æ* And the Græcians in their returne, use of Persia. *Æ* Alexander had them in his warre against *Darius*. *Æ* And *Pyrrhus* in his warre in Italy, Sicill and Greece. *Æ* The Græcians against *Brennus* King of the Gauls. *Æ* Both the Athenians, & Thebans at the battaile of Delos.

7 Arrowes.] Archers have alwayes beene of speciall esteeme for the field, and preferred before the other kindes of light-armed. Many nations have beene commended for their skill in shooting. Emongest the Græcians the Cretans were (of ancient time) sole archers, as *Pausanias* witnesseth. *Æ* It was not their service equall with the service of the Persians. For *Xenophon* confesseth, that the Persian bowe overreached the Cretan a great way: and that the Rhodians with their sling out-threw the Cretan bow. Of the Carduchians a people, through whose Countrey the Græcians passed at their returne out of Persia *Æ* *Xenophon* writeth thus: They caried noe other armes, then bowes and slingers. They were excellent archers, and had bowes wellnigh three cubits long; arrowes more, then two Cubits. When they shotte, they drew the string, applyinge there hand some what toward the neither end of the bowe, setting their left foote forward. With their arrowes they pierced both targets, and Curates. The Græcians puttinge thonges to the middle of their arrowes sent them back at the enemy in steede of Dartes. The same in effect is reported by *Diodorus Siculus*. Of the Parthian horsemen, *Appian* saith: When *Craſſus* commaunded the light-armed to disband, & goe to the charge, they went not farre, but meeting with many arrowes, and beinge gallied with them, they retired straight, and hid themselves emongest the armed, and gave beginning of disorder, and feare, representing to the sight of the rest, the force, and violence of the shotte, that rent all armes, they fell vpon, and made waye awell thorough bowes, that had the best, as the worst furniture defensive: givinge mighty and violent strokes from stiffe and great bowes, and forcing out the arrowe boisterously with the compasse, and bent of the bowe. *Æ* *Plutarch* hath the very wordes, that are in *Appian*. The Indians also were good archers, albeit not much praised by *Q. Curtius*. *Æ* See saith: their arrowes were two Cubits long, which they deliver out of their bowes, with more labour, then effect, for as much as the arrow, whose whole efficacy is in lightnesse, becometh all together unwieldy by reason of the weight. *Æ* And yet he telleth, that *Alexander*, at the assault of the principall City of the Mallians, was strooke thorough his Curace into the side becauſe the pappes with an Indian arrowe: with whome *Plutarch* and *Diad. Siculus* accord. *Æ* *Arrian* addeth the wound was so deep, that his breath was fene to issue out together with his blood. The Gothes and other people of the north, that invaded the Roman empire, had their chief victories against the Romans: by the help of bowes, and arrowes. *Æ* Vegetius (before alleaged) speaketh it plainly: So our souldiers, saith hee, vnarmed both

both bodies and heads, encountering with the Gothes, were oftentimes wholly defeated, and slaine, with the multitude of their arrowes. I may not pretermite the praise of our nation in this skill. Our owne stories testify, that the great battailes, we gayned against the French, were gayned by the stout shooting of our archers principal. *Æ* And that the English have heretofore excelled in archery & shooting, is cleere by the testimony even of Strangers. *Æ* *Cicero* (whom I named before) commending the use of bowes, as necessary for the service of the field (& that long after gunnes were invented) preferreth the English before all other, and stretch him downe, as a patterne for others to follow. *Æ* *Ad. P. Arutius*, disputing of the violence of arrowes, doubteth not to affirme, that an English arrowe with a little waxe put vpon the point of the head, will passe through any ordinary Corsette or Curace. Howsoever the credit of bowes is left, as this present, with many great souldiers, yet haue they of ancient time been highly prized. *Æ* Vegetius saith; how great advantage good archers bring in fight, both *Caro* in his bookes of military discipline doth shewe evidently, and *Claudius*, by augmenting the number of archers, and teaching of them the vse of their bowes, overcame the enemy, whome before hee was not able to matche. *Æ* *Scipio Africanus* (the younger) being to giue battaile to the Numantines, that before had forced a Roman army to passe vnder the yooke, thought hee could not otherwise haue the better, vnlesse hee mingled chosen archers in euery Centurie. *Æ* And *Leo* the Emperour in his Constitutions militarij hath this Constitucion amongst other: You shall commaund all the Roman youth, till they come to forty years of age, whether they haue meanes skill in shooting, or not, to carry bowes & quivers of arrowes. For since the art of shooting hath been neglected, many, & great losses haue befallen the Romans. *Æ* And in another place: you shall enioyne the Commandours vnder you, in winter to take a view, and to signify to the *Turmarches* (Coronells) now many horse, & what kinde of armes the souldiers, vnder their commaundes, stand in need of, that necessary provision bee made, & the souldiers be furnished in time convenient. But specially you are to haue care of archers; & that they, whome remaine at home, & haue vacation from warre, hold bowes and arrowes in their houses. For carelesse heerein hath brought great dammage to the Roman State. *Æ* *So Leo* This of old time was the opinion of the Romans concerning archers. Howe we are fallen out with them in our dayes (the skill of the bowe, being a quality so commendable, and so proper to our nation) I knowe not, vnlesse fire-weapons perhaps haue put them out of countenance. *Æ* And surely it may not be denied, that the force of fireweapons of our time doth farre exceed the height of all old inventions for any one enemy. *Æ* And, when I haue given them the first place, I will not doubt to giue the second to bowes and arrowes. Being so farre from casting them off, that I would rather follow the wisdom of the Græcians, whoe albeit they esteemed arrowes the best flying weapons, yet thought it not amiss to hold in vse slingers, and darters. Every weapon hath his property, and that which is fite for one service, is not fite for another. *Æ* The fire-weapons haue there advantages. They haue also their disadvantages. Their advantage is, they pierce all defence of armour, and lighting vpon a place of the body, the wound whereof endangereth life, they bring with them certaine death. Their disadvantages are, they are not alwayes certaine, sometimes for want of charging, sometimes through overcharging, sometimes the bullet rowling out, sometimes for want of good powder, or of dried powder, sometimes because of an ill dried matche, not fite to coale, or not well cocked. Besides they are somewhat long in charging, while the musketeer takes downe his musket, vncookes the matche, blowes, proynes, shutes, casts of the pan, casts

casteth about the musket, opens his charges, chargerth, drawes out his slinging sticke, rammes in the powder, drawes out againe, and puts vp his slinging stick, layes the musket on the rest, blowes off the matche, cockes, and tryes it, gardes the pan, and so makes ready. *All which actions must necessarily be observed, if you will not faile of the true use of a musket.* In raine, snowe, fogges, or when the enemy hath geyned the vantage, they have small use. *Adde that but one ranke (that is the first) can give fire upon the enemy at once.* For the rest, behind, discharging, shall either wound their owne Companions before, or else shoote at vantage, and so nothing endanger the enemy, the force of a musket being only available at point blank. Contrarywise the disadvantage of arrowes is in the weakness of the stroke. Which is not able to enter a Curace, that the force is howe more use. For can not weather bee founde, where in you may not have good use of bowes: raine, snowe, winde, hails, fogges, hinder little (especially the firing of the bowe being not so vantage) may rather profit. Because in them you can hardly discern, much lesse or aside, the fall of the arrowe. As for quickness in delivery the bowe farre excellith the musket. A good single archer is able to give five shoote in exchange for one of the muskietier, and that with such certaintie, that you shall not beare of an archer that misse the delivery of his arrowe, where the muskietier, often faileth by reason of the accidents and impediments before by mee rehearsed. Ioyne that a whole Squadron of archers, being embattailed, may shoote at once together: which onely the first ranke of muskietiers may doe. And make the case there were a hundred muskietiers, and a hundred bowe-men each digged into ten fletches, each fletche conveying ten men, the bowe men shall bee able to shoote as once a hundred arrowes (all these arrowes) for ten bullets given by the muskietiers, namely those ten of the first ranke discharging alone. It must not bee pretermitted, that the bowe and quiver both for marching, & all service, are lighter and of lesse labour to use, then a musket, which is one small advantage in armes and fight. To conclude the bowe-men may be placed behind the armed foute, and yet in shooting over the Phalange when the enemy before theying, and all the time of fight, even whilst they are at paye of pike, where the muskietier, there placed, must either idly look on, or else playing with his musket, most of all endanger his owne friends. Neither is the force of arrowes so weak, as is immagined, nor not in the arming of our dayes. For the pike, albeit hee have his head and body covered, yet are his legges, and feete, his armes, and handes open to woundes: any of which parts being wounded brings a disability of service. To say nothing of his face, and eyes, before which the showers of arrowes falling like a tempest without intermission, must needs breed a remediable terror, and make him thinke rather of saving himselfe, then offending his enemy. The muskietier being also unarmed is as subject to the shoote of arrowes, as the archer is to the shoote of the musket, and the arrow touching any vital part, as much taketh away life, as doth the musket. Lastly a horse-man for his owne person (I must confesse) is safe enough from the danger of arrowes by reason of his armour but his horse, being a faire and large mark, and having neither barbe, nor pectorall, nor ought else to hide his head or breast, how can hee escape woundes? Witnesse our fieldes in France, where our Archers alwayes beate the French horse, being harbed, and better armed, then our horse are, at this day. And for the bloody effect of bowes the story of Platarch is worth the rehearsing. He, in the life of Crassus hath thus, The Parthians opposing the Cataphracts against the Roman horse, the other Persians galloping heere and there dispersedly, and troubling the face of the field, broke up from the bottom, hills off, that raised infinite dust, whereby the Romans lost their fight and voice: and thronging together, & thrusting one another were wounded, and died not a simple, or quick death, but tormented with convulsions

a Plin. lib. 10.

b Plin. lib. 10.

convulsions and panges of grief, wallowing vp, and downe, in the sande to breake the arrowes in their woundes, or else endeavouring to pluck out the hooked heades, which had pierced vaines and sinewes, renting a fresh themselves, & adding torment to torment: so that many died in this manner, & the rest became vnprofitable. And when Publius Crassus desired them once more to charge the Cataphracts, they shewed their handes nailed to their targets, and their feete fastened to the ground, whereby they were vnable either to fly, or fight. These wonders did the Arabian bowes, which notwithstanding were not so bee compared to our ancient English bowes, either for strength or farre shooting. And that wee may not seeme so rashly open antiquity alone. The battaille of Caraculaca (commonly called the battaille of Lepanto) fought in our dayes between the Turkes & Christians by sea may serve for an experience of the service of bowes and arrowes. In which there died of the Christians by the arrowes of the Turkes above five thousand, albeit they were in galleys and ships, and had their blindes pretended to see from fight, and mark of the Turkes, where as the artillery of all sorts of the Christians consumed not so many Turkes: notwithstanding the Christians had the victory. Nowe then for vs to leave the bowe, being a weapon of so great efficacy, so ready, so familiar, and as it were so domesticall to our nation, to which wee were wont to bee accustomed from our Cradle, because other nations take themselves to the Musket, hath not so much as any shewe of reason. Other nations may well beare what they never had. Neither Italian, nor Spaniard, nor French, nor Dutche, haue these five hundred years, been accounted Archers. It was a skill almost appropriated to our nation. By it, wee geyned the battaille of Cressy, of Poitiers, of Agincourt, in France: of Navarre, in Spaine: By it, wee made our selues famous over Christendome. And to give it over upon a conceit onely (for no experience can say that our bowe was ever beaten out of the field by the musket) will prove an imitation of Aescops dogge, whoe carrying a piece of flesh in his mouth over a river, and seeing the shadowe in the water, fastened at the shadowe, and left the flesh. If heake not thus to abuse the service of muskets, which all men must acknowledge to bee great; I only shewe, there may bee good use of bowes, if our archers were such, as they were wont: which is not to bee despised, and will easily come with experience.

8. Darter] The names of darter are divers in the Greek Story. A Darter is often called Acontion: and thereof cometh Acontion, to throwe a darte, and darter is called Acontistae. So doth Aelian heere terme a darte. Sometimes a darte is termed Palton of the verbe *palto* signifying to shake or make quiver. The word Palton is much used in Arrian and Xenophon especially, when they speake of the Persian darters. The Diodorus Siculus nameth the Persian darter Saumion: which name also is given to a Grecian darter by Platarch, and by the same Diodorus. Sometimes a darte is named Doration: Dori, as I said, being a Speare, and Doration according to Suidas, a little speare, or darte. Aelian useth the word in this Chap. Lonche, albeit it properly signify the head of speare, or darte, yet doth it sometimes signify the darte it selfe. So is it taken in Xenophon, when hee telleth, that these weapons began to walk on all sides, *αὐτοὶ οὗτοι* (that is darters) arrowes, and flames out of fingers, and some out hands. Diodorus Siculus hath *αὐτοὶ οὗτοι* to throwe darters, even in the story of Alexander. The text we finde that speares were also cast under that name, and Xenophon saith, that the Thebans cast Dorata against the Lacedaemonians. The Darte hath beene in use amongst all nations. The matter, fashion, and force of the Roman darte may bee seen in Vegetius, and in Lipsius his Commentaries ad Polybium. The manner of the darter of the Macedonian armed appeareth in the fight between Choraque and Dioxippus before by mee mentioned: where wee find that Choraque cast

b Xenop. de reys. lib. 10. cap. 2.
c Arrian. lib. 10. cap. 1.
d Xenop. lib. 10. cap. 1.
e Diod. Sicul. lib. 17. cap. 1.
f Plin. lib. 10. cap. 1.
g Xenop. de reys. lib. 10. cap. 2.
h Xenop. de reys. lib. 10. cap. 2.
i Xenop. de reys. lib. 10. cap. 2.
k Xenop. de reys. lib. 10. cap. 2.
l Xenop. de reys. lib. 10. cap. 2.
m Xenop. de reys. lib. 10. cap. 2.
n Xenop. de reys. lib. 10. cap. 2.
o Xenop. de reys. lib. 10. cap. 2.
p Xenop. de reys. lib. 10. cap. 2.
q Xenop. de reys. lib. 10. cap. 2.
r Xenop. de reys. lib. 10. cap. 2.
s Xenop. de reys. lib. 10. cap. 2.
t Xenop. de reys. lib. 10. cap. 2.
u Xenop. de reys. lib. 10. cap. 2.
v Xenop. de reys. lib. 10. cap. 2.
w Xenop. de reys. lib. 10. cap. 2.
x Xenop. de reys. lib. 10. cap. 2.
y Xenop. de reys. lib. 10. cap. 2.
z Xenop. de reys. lib. 10. cap. 2.

Alían, as hee pretendeth vñe, as it were, a middle kinde of arming. For theire Target, called *Pelta*, is a litle light Target, and theire pikes come much short of the Pikes of the armed. *Vñe* happily *Lipſius* haue borrowed the wordes out of *Suidas* imagining them to bee *Alíans*, and so citeth them vnder his name. For I finde them in *Suidas* in the explication of military appellations; but I finde them in noe edition of *Alían*, that his herbe hath beene printed.

- 11 A litle flight target called *Pelta*] The forme of this litle target is diuersly expressed by diuers Authors. The Schollastes of *T. Theoclydides* giue it a *T. Treragonall* or four sided shape: with whom also *impetū* *Suidas*. *H. Hyschius* saith, *Pelta* is a litle target having no circumference, meaning, I thinke, it is not rounde. Hee saith also it is a *Thracian* weapon: to both which significations *Suidas* agreeeth. The *Thracians* used these kinde of Targets, and often sent these Targeteers to ferre the *Græcians*. *Nymphodorus* (saying to make a league betwixt the *Athenians* and *Stalæus* King of *Thracia*) promised to procure *Stalæus* to send them an army of horse, and *Peltasts* (Targeteers.) *Xenophon* speaking of the *Thracians*, that assaulted his lodging, telleth, that after the Trumpet sounded, and many of his souldiers came to his aide, the *Thracians* fled casting, as their manner was, their Targets (*Peltas*) at their backes. When *Dercylidas* invaded *Bithynia*, *Seuthes* the K. of *Thrace* sent him horse and *Peltasts* (targeteers) to his aide. But the *Pelta*, that *Alían* here mentioneth, was rounde. *Suidas* in the wordes, before alleged by *Lipſius*, as out of *Alían* called this target *Alpidice*: that is a litle *Alpis* (such as the *Macedonians* bore, which were without all question rounde.) The invention of this *Pelta* is attributed to *Iphicrates* the *Athenian*. For whereas the *Athenians* before his time used large round targets (aspides) to which were not so easy to bee quickled, being heavy, hee provided them litle targets to make them light, and well fitted for all service. He altered not the forme of the rounde, but diminished the weight, in abating of the breadth. *Æmilius Probus* saith, hee made them beare litle targets (*Peltas*) in steede of large rounde targets (*Parme*), where vpon they were euer after called *Peltasts*. The invention of this kinde of Target is attributed to *Iphicrates*. For the litle targets of other formes were long before the age of *Iphicrates*. *Cyrus* the younger had *Græcians* Targeteers in his army: and the *Græcians*, at their returne out of *Persia*, and likewise those, that *Plutarch* saith *Thrasibulus* to recover *Athen* out of the handes of the thirty Tyrants. All these were before *Iphicrates* time. *Lipſius* taketh the *Pelta* to differ litle or nothing from the *Parma* velitaris of the *Romans*, which doubtlesse was round. *Polybius* saith, the *Roman* horse-men targets (*Parme*) were like to Cakes named *Popana*, which according to *Suidas* were broad, rounde, thinn, cakes.
- 12 And his pike is much shorter] If it bee as *Diodorus Siculus* and *Æmilius Probus* report, that *Iphicrates* was the inventor of the armes of the Targeteer, the pike should bee litle shorter, then the *Macedonian* pike. Hee gaue them litle targets for great Targets, and doubled the length of their pike, and sword. If the length of the pike were doubled, I cannot see, how it should come much shorter of the *Macedonian* Pike. But it may bee, that they were long at first, and that afterward, and commodiously brought them to a litle size, to the end the souldier should bee nimble and ready at charges. But had the *Peltast* noe other armes, then are here mentioned? Hee had. And's first hee had a linen Curace for lighnesse sake, and then a sword of double length to his former sword. Further hee had darts: *Xenophon* telleth, that, in the battaile betwixt *Ataxerxes* and *Cyrus*, *Tikaphernes* charged the *Græcians* Targeteers, whose diuided them selves into two partes, and plied his horse with darts as hee passed through them. The same *Xenophon* afterward telleth of the Targeteers vnder his commaunde, that hee directed them, to hold

hold their fingers in the thongs of their darts, and bee ready to throw, when hee gaue a signe: And that the very Targeteers of *Iphicrates* with their darts and other misliue weapons destroyed a whole Mora of the *Lacedemonians* without coming neere or closing with them. Tet^a Leo giueh the Targeteers not more, then targets, and speares (Dorata.) But in that (as in many other things) I make noe doubt, hee followeth *Alían*, whose wordes also hee well might reseyne, as well in this place, as in any other. In perusing the story of *Alexander* (in *Arrian*), the most faithfull historian of this deade, I finde noe Targeteers by the name of *Peltasts* in all his army. The names of Armed, of archers, of Darters, of slingers I meete often: but not of *Peltasts*. Which made mee some doubt, whether *Alexander* euer used them or noe. Since vpon better consideration I am induced to thinke, though the name in the story faileth, Tet the kinde of souldiers, so armed, and so appointed, as *Alían* describeth, may easily bee found: and that vnder the name of *Hypaspistes*. Which name albeit much falsely signifieth him, that carries another mans Target, yet it is also applied to souldiers, that are neither light, nor heavy armed, of which kinde the Targeteers were, as a meane betwixt both. That *Hypaspistes* signifieth noe heavy armed, may bee evident by the wordes of *Arrian*. *Alexander*, when hee sawe the streights of *Cilicia* possessed with a strong garr, left *Parmenio* behinde withall, that were heavy armed, himselfe about the first, watche taking the *Hypaspistes*, and the Archers, and the Agrians (who were darters, as I haue shewed) led on in the night toward the streights, purposing to fall vpon the watche, before hee was looked for. Hee left all the heavy armed with *Parmenio*, and tooke the *Hypaspistes* with him. And in another place hee saith: *Alexander* commaunded the *Hypaspistes* first to passe the river, and afterward them the *Macedonian* armed. Hee distinguisheth the *Hypaspistes* from the armed. And straight after: Three dayes after *Alexander* vnderstanding that *Cleitus* & *Glaucias* were ill lodged with their army, & neither held watche, nor had cast a trench for their owne security (for they imagined *Alexander* marched away for feare) and that their Campe was stretched out to a needlesse length, secretly repaied the river a litle before night, leading with him the *Hypaspistes*, and the archers, and the Agrians, and the Phalanges of *Perdiccas* and *Cœnus*. And in the same booke at the assault of *Thebes*, when *Perdiccas* had engaged himselfe and brought *Amynas* with his troopes in the same danger, *Alexander* laboie to leaue them in hazard, advanced with the rest of his army, and gaue a signe to the archers and Agrians: to enter the trench, the *Agemata* (*Livy* translateth them legions) and *Hypaspistes* hee held without. So that in all these places hee distinguisheth them from the heavy armed, and maketh the *Hypaspistes* one, the heavy armed another. I might adde other passages out of the same author, but these will suffice. That they were not of the light armed may bee proued by the same places of *Arrian*. Where they are alwaies distinguished from the archers and Darters. There targets make them vnfit for slingers, and mention of slingers I find in other places. The very name sheweth that they carry targets, and the great Etymologicion alwaies them speare beside their targets whereby they are clearly exempted from the light armed. It remaineth then, that they be the *peltasts*, which *Alían* here speaketh of, especially since they were armed with target and speare, which armes hee giueh to his targeteers, and to noe other, except it be to the armed.

13 Cataphracts] The horsemen are diuided into two kinds. *Cataphracts*, complete armed and not *Cataphracts*. *Cataphracts* are those, that cover themselves and horse with armor. Not *Cataphracts*, that fight with launces, or with light weapons. *Livy* termeth *Cataphracts* (*Loricatos*) because they wore cuirasses. The other sort are either lanciers or *Acrobolists*. *Acrobolists* came not to the stocke, but plied the enemy a farre off with

Xenoph. hellen.
Græc. lib. 5. 519
b Leo cap. 6. 5.
17

Arrian. lib. 1. 1. 11

Arrian. lib. 1. 7. 1. A

Arrian. lib. 1. 9. 2

Livy. dec. 41.
lib. 5.

The Tactics

fieng weapons. The Lancers closed, and charged the enemy with their lances. To morrow Cataphrachi (to cover with armes) growe name to the horsemen Cataphracts: and as the horsemen are called Cataphracts, so is the furniture of horse and man called Cataphragma. Hen they were armed Arian hit with them by faith they cover themselves and their horses with armour yet was it not always, that the whole horse was armed. * For Xenoph speaking of the Persians in the time of the elder Cyrus, saith, they armed their horses with front-plates and pectorals & covers for their thighs. As much hee saith of the six hundred horse that followed Cyrus the younger against Artaxerxes, saying they wanted cover for their thighs. The horsemen themselves be queneest gear Curiaes, and cuisses, and head-pieces. So it appeareth that the horse were not all over armed, but only their heads their breasts and their forethighes. The Persian speaking of the Cataphracts in the time of Lucullus, saith, their legs, and thighs were unarmed. Concerning the Parthians Sauidas, I know not out of what Author, hath thus: The Curia: of the Parthian horsemen is made in this manner: The plate before covereth his breast, and thighs, and his hands to the fingers end, and his legs. The hinder part, his backe, and necke, and all his head. There are buttons made for the sides, with which both the parts being fastened, it maketh the whole horsemen seem, as if hee were made of iron. The iron neither hindred the stretching out, nor the gathering up of his limbs. It is so exactly fitted to the horse and his life, that it passeth the eye. Likewise the horsemen were whole horse with iron, except his hooves, but if hee had his owne hooves, hee might have a little advantage, in case their horse misfired. Cautiusd/Grieth the forme in the Persian horsemen, whose furniture, be faith, was made of plate fastened together in continued dependances of armes, as if a Capian speaking how the Parthians seeking to terrify Crassus, and his army, upon the saddle use call away the covers of their armour, and both themselves appeared in shining curiaes, and head-pieces the Maccian iron of which they were made diving forth a flashing, and disprised a twinkling light, and their horses glistering in brasse, and iron furniture. To doth Apsian in the same place, note, that the belly of the horse was not armed. A For the french horsemen saith he, that followed young Crassus, when they perceived, how little they prevailed with their staves against the fure, and vnpercieable amour of the Parthians, lighting from their owne, and creeping vnder the Parthian horses, stroke them into the bellies, and they impatient of paine and dinging heere, and there, an I treading vnder foote, as well their riders as their enemies, died in the place. Plutarch hath the like. The Cataphracts, beside their armour of defence, had a lance, or horseman's staffe, to fight with all. * Plutarch affirmes it: Lucullus, saith hee, after hee sawe Tigranes his Cataphract horsemen (whose were of most account) defended, as it were, by a hill, that had the ground about plaine, and broad, & the ascent (which was about fouer furlonges in length) not very hard, or steep, he commaunded his vnticed and galled horsemen, hee had, to giue vpon the flank and to put by the lances. And in this hee was able to see the very strength of the Cataphract is his lance, and it alone hee is able to see either in defence of himselfe, or annoying the enemy: being by reason of the weight and hardness of his furniture like a man thrust, and locked vp in a wall. Plutarch to Plutarch. Like wise the Partian Cataphracts, albeit they had bowe, and arrows, yet they had also lances, with which they came to the stroke with the enemy. * When the arme of Anthony (saith the same Plutarch) sawe the Parthians ready to giue on, the arme turning their face: about toward the enemy, tooke in the light armed, and thrust them vp with in their battels: themselves kneeling vpon one knee, and

h. I. d. out their targets before, the second ranks with their targets covered the heads, and vpper ranks the foremost, & the following ranks did the like one for another, the figure was like the rying of a houle, & represented a few worth the facing, and was the furest defence the might bee, to make the arrows glaunce of, without harme doing. The Paynter in imagining this kneeling proceeded from wearinesse, and faintnesse, layd aside the bowes, and taking in hand their lances, ranne vpon the Romans, whose gates, he shewte sprung vp presently, and striking them with their darts, flew the first, and put the rest to flight. By the 2. te testimonies the launce of the Catafract is clearly proved. In what manner the Catafracts came to fight, *Nazarius* (cited by *Stowe*) sheweth plainly in a *Panegyric* of his. The Catafracts, (such he, in whom) was the principall strength of the field, w^{ch} this discipline in charging. After closing their files, they keepe an equalitie in moving forward to charge, & being free from wounds, they break without difficulty any strength that opposed against them. They are said to bee free from wounds, because both their shields & helms (especially before) are covered with fure armes. Their moving w^{ill} be slow, because the weight of their armes, which *Stowe* saies was recompensed with the violence of their charge, was so great, that they were unable to resist. And yet they had another inuention, in that, being overthrown, slipping, or falling to the ground, neither horse nor man, were able easily to raise themselves againe. Such was the weight of their armes.

34. Launceis, & such] *Launciers, faith, Eliaen, iaine with the enemy, & fighte had to haue with the launce. And did not the Catapraictes, for they dyd, but their armour dyffered much. The Catapraictes both horse, and man, were all in armour. The horse of these Launciers was not armed, and him selfe, albeit hee were armed, was not armed, but that many parts of his body were bare of armes. And his armour came much short of the complete. Arrian faith that the Macedonians being launciers: were not able to encounter with the Scythians, who were Catapraictes, both because of their number, and also of their manner of arming. And as the Launciers armour was not so beuie, as the Complete, so was it more beuie, then the armour of the foote. Xenophon seemeth to signifie so much, telling of him selfe, that taking the targetiers of the front, and some out of the middle of the hollow square battail: and three hundred chosen men, that Cherilophus had with him in the front, hee marched away with all speed to scife upon the toppe of a certaine hill. And exhorting his souldiers to haue, you may well, quoth Sotridas, the Sicionian, talke of haile, that are on horseback. I, in the meane time with this heauie target, am fearece able to marche. Xenophon hearing this, freight dismounted, and disranking Sotridas, rooke away his target, and with it on his shoulder continuing his haift in marching. By chance hee had on at that time a horsemans armour, whereof hee altho hee was not verspreffed, yet slacked hee nothing of his power. The swift footed souldiers bearing and reviling Sotridas compelled him back to his target, and place againe. At last they gained the hill, they purpose, and made the enemye abate on the nether ground. Xenophon was not verspreffed with the horsemans armour. It had bene so equall to fight with a foote man, hee might, as well haue endured it, as the rest. Plutarch seemeth likewise to signifie the horsemans armour. Philopaeus, faith hee, willing yet to giue more strength to the Kings party (& hee meaneeth Antigonus, the gardian of Phillip after the ward King of Macedonia) & to come to hands with the enemy that was already in rout, lighted from his horse, and in a horsemans Curace, and heauie armour.*

armour, wrestling hardily, and laboriouslye on foote with the ground, that was rough, & full of brooks, & ditches, hee was strooken through the thighs with a dart: the stroke beinge not dangerous, but forceble, so that the head passed through both his thighs. Hence both the heaviness of the Launciers furniture may be seen, and that Philopomens thighs were unarmed, through both which at once hee was wounded with a dart: And so the Launcier not so surely armed, as the Cataphract. The armes, that the Launcier bore are described by * Polybius speaking of the armes of the Roman horsemen, who wroteth thus: The armour of their horsemen is at this day like the Grecian. Of old they had noe cuirasses, but fought in short gownes girded to them. By reason whereof they were ready, & active to alight from, and gett vp quickly, on their horses. But their fight was dangerous with the enemy, because they wanted armes. Their shawes had two incommodities. For, being made slender and quivering, they neither could touche the mark, they ayimed at, and most of them, shaken with the motion of the horse, fell out to be broken, before the head touched, or fastened upon any thing. Ioyne, that, having no iron point at the butt end, they served but for one stroke onely, and that at the first. And yet the head being broken of, the remnant of the staffe was of noe vse. The targets they had, were made of ox-hyde in forme like to cakes named *Papane*, which are used in sacrifices. And they were neither fite to encounter the enemy, by reason they had noe stiffnesse or fastnesse in resistance, and being resolved, and foked, or putrified with raine, they could not bee any thing worthe. Finding these inconveniences by experience, they quickly chaunged for the Grecian armour, In which the first stroke of the head of the staffe is certeyne, and worketh the designed effect, by reason of the forme, which is not quivering, but stiffe and sturdy: & likewise turning forward the butte end, which is armed with a sharpe point, they might therewith fasten a sound, and forcible blowe upon the enemy. The like may be said of the Targets, which both in charging, and defending, haue a sure & vnfailable vfe. Which they noe sooner saw, then imitated. For the Romans, if any other nation, are good to change their fashions, and to chooseth that, which is best, wheresoever they finde it. The Launcier then had a Curace, a head-piece, a lance, and a sword for his armes, and this was generall in Launciers; but some had besides a target, and were therefore called targetiers. The Launciers were called in greke Doratophoroi, or Xestophoroi: two severall appellations in shewe, but signifying in deed but one thing, the one being derived from the matter, the other from the forme of the lance. * Doru, as I said before, signifyeth wood: and because all the Launciers armes excepting the lance, were of other matter, then wood, the lance was called Doru, (of the wood) and the Launciers Doratophoroi. As for Xylton, or Xeston (for they signify one thing) is cometh of the verbe Xuo, or Xeo to shawe, or polish (as our ioyners doe) and the launces, being made of wood hauen, or polished are named Xylta, or Xesta, of the forme (as I said) that is given them by shining, and the Launciers, that beare this launces, Xestophoroi, or Xyltophoroi. And here I am once to note for all, that wee are not to prisse wordes according to the proper significations of their primitives, from whence they are derived. For considering there are more things, then names of things, (as Logicians say) the most copious language, that is, cannot give proper names to all. Hereof come the wordes of divers significations. And howsoever names seme at first rough, & strange, vfe, and custome maketh them smooth, and gives them passage. As the coyne of a Prince is currant by the stamp, hee sitteth upon the metall, what metall soeuer it be, fine, or base.

* Polyb. lib. 6.
471. B.

* Arrianus de
Milit. Xyston
lib. 1. c. 15. F.

16 Acrobolists] The word importeth such, as throw aloft, or from alofte. Ballo signifyeth to throw: Acron, the highest, or the uttermost. By common vse Acrobolizo is taken for to dart, and by consequent to skirmish a farre off. Because such as cast stinging weapons, as darts, and stones, and the like, came not to steadfast fight, but lay aloft, and onely threw their weapons at the enemy, and of so doing are called Acrobolists. Acrobolismos in Polybius is interpreted Skirmishing. And Diodorus writeth Acrobolismos, and a short meddley in fight together, which Xenophon writeth Acrobolismos by another word flowing from the same fountain.

17 Tarentines] They are so called of a City in Italy Tarentum by name, the inhabitants whereof, that were horsemen, used this manner of fight. But he maketh two kinds of Tarentines, one, that ever fought a farre off with darts, and never came to hand with the enemy, the other, that after a dart or two cast close up, and fought hand to hand. Livy speaketh of a third kind of Tarentines, who used in fight two horses at once made fast together, and one being weary, leaped upon the backe of the other.

18 Some vse darts a farre off] Of the manner of fight of these horsemen, the passage of Xenophon is worth repeating. After these things done, saith hee, the aide of Dionysius (which hee sent the Lacedemonians) arrived, being more, then twenty Gallies. They brought French, and Spaniards, and about fifty horse. The next day the Thebans, and their confederats, embattailing their armie, and filling the with the whole plaine even to the sea-side, & to the hills, that lay about the City (of Corinth) destroyed whatsoever, might be true to any vse. The horsemen of the Athenians, and Corinthians, seeing the strength and multitude of the enemy, came not neere vnto them: but the horsemen of Dionysius, albeit fewe in number, galloping heere, and there, disorderly, and putting spurs to their horse, charged them with their darts, and in case the enemy followed, they returned with all speed, and then turned againe, and threw darts afresh. In doing these things they vied to alight from their horse, and rest themselves, and if any of the enemy singled out to fall upon them, leaping quickly againe to horse-backe, they fled: and being pursued any distance from the army, as soome as those that pursued them retired, the Tarentines followed, and plyed them with their darts, and put them to great distresse: forcing the whole armie to advance, and retire, as they list themselves. So farre Xenophon. Another example I will adde out of Livy of the Numidians, whose manner of fight is all one with the Tarentine manner. In Liguria saith hee, nothing worthy of memorie was done a long time. At the end of the yeare all things were brought to extreame hazard. For both the Consuls camp, being assaulted, was hardly defended, and not long after, when the armie was led through a Forrest, the way whereof was straight, and narrow, the Ligurians possessed themselves of the mouth of the straights. Through which when the Consull could find no passage, hee turned about his armie, and purposed to reduce it, the way he came. But the mouth of those straights was likewise possessed by a part of the enemies forces. And now the remembrance of the Desaster of Caudium presented it self not onely to the minds, but even almost to the eyes of every man. There were wellnigh eight hundred Numidian horse at that time in the camp. The Commander of them promised the Consull to breake through on which side hee pleased; onely he desired to know on which side most hamblers, and villages were. Upon them, said hee, I will fall, and sett the houses on fire presently, that, that seare may

* Diodorus Sicul.
lib. 15. c. 48.
* Xenophon de
Cyn. lib. 3. p. 20. C.

* Liv. decad. 4.
lib. 5. c. 2. C.

* Xenophon Hist.
lib. 7. c. 17. E.

* Liv. decad. 4.
lib. 9. c. 2. A.

compell the Ligurians to forsake the freights, they hould, and runne severall wayes to defend theire owne. The Consul much commended the man, and liked him with hopes of promiscs. The Numidians vp to horse, and began to ride heere and there, before the enemies gards, p. ovoking yet no man to come thing at the first fight was more contemptible. The horie, and men, were little, and lean. The horifman vngirded, and vnarmed, saying that hee carried darts; the horie without a bridle galloping d. forwardly with a stuff neck, and a head thrust out at length. They purposely augmenting this contempt shd from their horses, which at first were intentiue, and ready for a charge, became gazers on, and the most part vnarmed themselves, & sett downe vpon the ground. The Numidians rode vp neerer, and then backe againe, and by little, and little, got to the skirts of the forest, as if their horses, being resty, had caried them forward against their wills. At last, putting spurres to they broke through the midst of the enemies gards, & entering into a larger field, they set fire on all the houses next the way; then burned they the next village, and wasted, and filled, all things with fire, and sword. The smoke first, then the cry of the people affrighted, lastly oul. d men, and children, fling for succor, raised a tumult in the campe. Therefore without cons. ill or commaund every man of himself ranne to the defence of his owne; and in a moment both the enemies campe was forsaken, and the Consul, delivered from his siege, came to the place intended. By these two examples the kinde of fight, that these darters one horse backe maintained, may be perceived, which was no more to neer the enemy, but to keep a loose, and lett their darts fly. Besides not to obtruse any order in files, or ranks, but straglingly to gallop the field, seeking by their d. s. and to talke the enemies out of his strength, and so to worke their advantage. And albeit in the second example, the Numidians vsd not their darts, yet they would haue done it, if need had been; and you shall find in other places of Livy, and Polybius, they did vsually, as also in Caesar.

19 After they haue spent one or two] These darters on horsebacke differ from the other before mentioned, because at the last they toyne, and fight hand to hand with the enemy, which the other did not. And what fight they with all: not with lance; for then should they be Lanciers, of whom we haue spoken. But they fight with battel-axes, swords, and such other short weapons. Suidas affirmeth it, alleged by Arrianus: *That, faith hee, at first cast light darts a farr off, and after ward approaching, Ioyne with the enemy, fighting with battel-axes, or swords; which kind they call light-horifmen.*

20 The horifmen, that vse bowes] I need not alledge any thing to shewe that the Scythians were good archers. It is knowne to any man, that is not ignorant of History. I will onely note, that in fling from the enemy, they harmed as much, as in falling on. For as they fled they turned half their bodies backward, and shotte at him, that followed, and effected not such thing. Of which falshion of fight Plutarch giueth this iudgement. The Parthians, faith hee, in their light shoote backward, & doe it best of all other, except the Scythians, the invention being witty, both to faue themselves by that defence, and also to take away the shame of flight.

That which Plutarch attributeth to the Scythians and Parthians, Xenophon saith, the Persians vsd also, both for manner of fight, and flight.

The framing of a Phalange, and definition of the art Tactick.

CHAP. III.

By seeing every phalange containeth an vniting of bodies, offices of command, order in place, a Convenient number of men, and wordes of Direction as well for daily exercise, or traying, as for true fights, It seemeth necessary to deduce euery of these things into particularity. The first labour therefore in the art Tactick is for a Generall out of a multitude, that cometh to hand confused, to chooe the fittest men, and dispose them into convenient places (that is to order them into files, and bodies) and of the whole number to proportion a reasonable levie, & fitting the service in hand. For to dispose and enable an Army, skillfully to march, to encampe, & to embattle, is a matter of no small consequence. In as much as we often find mighty Armies through their disorder to haue been defeated by a handfull of men well disciplined & exercised. Wherefore Aelian defineth this art to bee a science of warlike motion: Polybius, To be a skill whereby a man taking a multitude forwarke or dereth it into files, and bodies, and inst. Teth it sufficiently in all things pertaining to warre.

Notes.

1 THE first labour] After provision of armour followeth choice of men. What men, and out of what climate, and of what profession, and of what age, and of what constitution of body, and of what education, are to be chosen, because Aelian referreth to the discretion of the Generall, not sitting downe any particular, I will likewise passe over, noting onely some places, where hee, that is disposed to fight, may find the circumstances of choice of souldiers. Xenophon, Cyrop. lib. 1. 3. 2. A. B. Polyb. lib. 6. 4. 6. C. Et Lips. ad Polyb. lib. 1. Dialogo. 2. 3. 4. 5. Veget. lib. 1. cap. 2. 3. 4. 5. 6. 7. Et Stewechius ad hoc omnis cap. 31.

2 A reasonable levie and fitting the service] Levies are to be made according to the warre, which is undertaken. The enemy is not always of one strength. Sometimes the forces, against which we are to lead our army, are more, sometimes lesse. The Romans, if the number of enemies were not very great, vsd but a Consular Army, which consisted of two legions of Romans, and of as many foote of their Allies; when greatest, only ioyned two Consular armies together. And for Allies their foote, as I said, was C. equal with the Roman foote, their horse were treble as many, and the Romans having three hundred horse to a Legion, the Allies had nine hundred. Tet in case of great necessity, wee read, that the number of the Legions was increased in a Consular Army. Polybius reporteth that, a little before the battell of Canne, the Consul Lucius Aemilius, and C. Terentius, had allowed in their army, which they led against Anniball, eight Legions, which never was done before. Alexander the great being to invade the Kingdom of Persia, which for wealth, multitude of men, and largeness of Territories, was esteemed the richest, mightiest, and greatest Empire at that time in the world, had not in his army above one and thirty thousand foote, and five thousand, and odd, horse. C. Army composed of multi. c. neither fit to be guided, and commanded, nor yet to be provided for.

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The number of a file is diversly given, * for some allow it eight, some twelve, and some sixteen men. Wee for this time will retaine the number of sixteen, both because that number is proportionable to the indifferent length of a Phalange, and also, if we require at any time to double the depth thereof, and to giue it thirty two men, or to lessen, and contract it, and make it but eight; neither of both shall hinder the service of the light armed behinde, for whether they vse Darts, or slings, or Arrows, they may easilie with their sleng weapons overreache the depth of the Phalange.

Notes.

Next after arming, and choyce of souldiers, it followeth to put them in order for service, that is first to file them, then to band them (which is ioyning of files) and lastly to embattle them, which is to make a Phalange. Of these in the following chapters.

To make files] The Tactics have not expressed the precepts of this art all in the same wordes. A file is heere called Lochos, the signification whereof is divers. Sometimes it is taken for an Ambush, and Lochan significeth to lie in Ambush: it significeth beside a number of men, that are of one body, as it were, and under one commander, who is called Lochagos, and Lochizo is to sett in files. The number of this body hath bene diversly taken. The Thebans Lochos Hieros first instituted by Gorgidas, or as other say by Epaminondas, consisted of three hundred men. The Lochos of the Lacedemonians of five hundred and twelue. Xenophon in his returne out of Persia telleth, that the number of the Lochoi of the Grecians, which hee ledde, was almost a hundred armed men. And when they chose extraordinary men to preserve the Platium (a hollow forme of square battaile) where in the Grecians marched) from breaking, they appointed fix Lochoi, of a hundred a peece, for that purpose, and Commanders to leade them. And after hee reckneth seventy men to a Lochos. And in the first booke of Cyrus his expedition, hee telleth of two Lochoi of the armed of the Regiment of Menon, that wereaine by the inhabitants of Cilicia, and counted them a hundred men. Cyrus in the same Xenophon commandeth his Lochos to be made of twenty foure men. But the Lochos, that Alian heere speaketh of is a lesse number, namely sixteen, which was the file of the Macedonians, as appeareth by Arrian, and Polybius. Albeit Arrian calleth it not Lochos, but Decas, and Polybius the depth of the battaile. This number of sixteen was vsed by the Grecians also before King Philips time, as appeareth by Xenophon in his historie of the Grecians. And likewise by Thucydides, who reporteth, that the Siracusan were so ordered against the Athenians. Leo saith it was the manner of the ancient warriors to make a file of sixteen, & calleth it a Tetragonal number.

2 Some allow it eight, some twelue] The Lacedemonians made the depth of there battaile sometimes eight men (for a file is it, that mesureth the depth of the battaile) and so fought with there enemies. Thucydides winnesth as much: the Lacedemonians, saith hee, were not alwaies ordered in depth alike, but as there Lochagoi (who were commanders of five hundred and twelue a peece) thought good, commonly notwithstanding the depth was of eight a piece. Xenophon also writeth, that Dercyllidas the Lacedemonian, being to fight with Trissaphernes, and Pharnabazus, ordered his Phalange into eight. The same proportion was helde by Antistippus the Lacedemonian against the Corcyrans, and

and by Clearchus the Lacedemonian against his enemies. Xenophon saith, that Thrasybulus the Athenian, sailing out of Pyrum against Pausanias the Lacedemonian King, ranged his men into eight. His wordes are: When Thrasybulus and the other armed sawe these things, they quickly gave aide to there owne people, and put there armed in order eight deepe. Pausanias being hardly layed vnto, and retiring foure or five furlongs, commanded the Lacedemonians, and there Allies, to resort vnto him, and there casting his men into a deepe Phalange, ledde against the Athenians. Out of which wordes wee may note, that the Lacedemonians of force not alwaies that order of eight deepe, but varied according to place, or other circumstance. Yet ordinarily they gave but eight to a file, or to the depth of there Phalange, as Thucydides winnesth before. The same Thrasybulus with his complices entering the base City of Athens called Pyrum to free his countrey from bondage of the thirty tyrants, having but a fewe with him, possessed the court, which led to the temple of Diana, called Munychia, and being assaulted by the garrison of the Lacedemonians, ordered his armed men into ten deepe, and the light armed behinde them. The tyrants, and there followers stood in battaile fifty deepe. At the battaile of Leuctra the Lacedemonian armed there euell in depth, the Thebans fifty. Alexander the great leading his armie against Clitus, and Glaucias, the way being so narrow, that no more then foure might marche in front, made the depth of his armie a hundred and twenty. And the souldiers that Xenophon brought backe out of Persia, when they purposed to sacke Byzantium, put themselves without commande in order of fifty deepe. In the text is fifty deepe, but the margene hath eight: which I take to bee the truer reading, because Xenophon saith, the place was faire to fit a battaile, being void of building, and having an even plaine. And it was not the manner of the Grecians to make a Phalange fifty deepe, vnlesse there were extraordinary occasion. In the battaile of Delos betwixt the Athenians, and Thebans, the Thebans were five and twenty in depth, the Athenians but eight. The same Athenians were eight in depth against the Syracusans. So that the depth of eight was much vsed among the Grecians. How be it I find not, that they called a file of eight by the name of Lochos. Cyrus the elder made his file of twelve men, and the leader thereof hee called *ἡνδοκατος*, and *ἡνδοκατος*, and the file is esse decas, which in signification albeit it is importune, yet wee must retaine the word, as it is vsed, and not fly to the original of the Etimologie, as I noted before vpon other occasion. But Alian maketh his file of sixteen. His reason followeth.

3 For whether they vse darts &c.] The file being sixteen in number, the souldiers therein every one having after distance from other three foote, take up in the whole depth forty eight foote, and being doubled to thirty two men, they take vp ninety six foote, which amounteth to thirty two yards. That bowes and slings easilie out reache this distance, appeareth by egeus, before by mee alleged, who saith, they stroke there mark six hundred foote off, which in our account by scores, is ten score. Of the darts a man may rather doubt, which notwithstanding with an exercised armie is sent much further, then thirty two yards. Epistippus writeth, that a dart was usually cast foure hundred foote, which amounteth to thirty two yards, or as ween shooting measure, six score and odd. The reason why Alian placed the light armed behinde wee shall see here after in fit place.

a Polyan. lib. 1.
in Fabricat. § 24.
b lib. 4. in Alex.
§ 21.

b Polyan. lib. 1.
c Georg. 1.
d Allen. diogn.
lib. 4. cap. 4.
e Plin. in Melop.
f Xenoph. hyst.
lib. 1. cap. 1.
g Xenoph. hyst.
lib. 1. cap. 1.

h Xenoph. hyst.
lib. 1. cap. 1.
i Xenoph. hyst.
lib. 1. cap. 1.

k Arrian. lib. 7.
l Arrian. lib. 7.
m Polybi. lib. 17.
n 744 D.

o Xenoph. hyst.
lib. 1. cap. 1.
p Thucyd. lib. 2.
q 438 B.

r Xenoph. hyst.
lib. 1. cap. 1.
s Thucyd. lib. 2.
t 395 A.

u Xenoph. hyst.
lib. 1. cap. 1.
v Xenoph. hyst.
lib. 1. cap. 1.

w Xenoph. hyst.
lib. 1. cap. 1.
x Xenoph. hyst.
lib. 1. cap. 1.

a Polyan. lib. 1.
b Xenoph. hyst.
lib. 1. cap. 1.
c Xenoph. hyst.
lib. 1. cap. 1.

d Xenoph. hyst.
lib. 1. cap. 1.
e Xenoph. hyst.
lib. 1. cap. 1.

f Xenoph. hyst.
lib. 1. cap. 1.
g Xenoph. hyst.
lib. 1. cap. 1.

h Thucyd. lib. 2.
i Thucyd. lib. 2.

k Xenoph. hyst.
lib. 1. cap. 1.
l Xenoph. hyst.
lib. 1. cap. 1.

m Xenoph. hyst.
lib. 1. cap. 1.
n Xenoph. hyst.
lib. 1. cap. 1.

o Xenoph. hyst.
lib. 1. cap. 1.
p Xenoph. hyst.
lib. 1. cap. 1.

The order and parts of a file or Decury.

CHAP. V.

THE best man of every file is the first in place, and hee, that leadeth the file, who is also called the file-leader, the Commander, & the fore-stander. The last man of the file is called the Rear-Commander, or bringer-up. The whole file it self is termed a *verse*, and a *Decury*, and of some an *Enomoty*. Yet there are, that hold *Enomotia* for the fourth part of a file, and the Commander of an *Enomoty* they call *Enomotarcha*, and two *Enomoties* they take for a *Dimery*, & name the Commander thereof *Dimerites*, so that the half file is said to bee a *Dimery*, and the Commander thereof *Dimerites*. This man is the last of the file. Hee, that standeth next behind the file-leader, is named a *follower*, and the next after him a *Leader*, and the next after him againe a *follower*. So that the whole file consisteth of *Leaders*, & *followers* placed successively one after another. * It becometh the file-leader to bee more sufficient, then the rest of the file, and next him the *Leader* of the half file, or bringer-up. They define a file to bee a *Rowe* of followers placed according to their worth successively after a file-leader.

Notes.

THE best man of every file.] Why the file-leader ought to bee the best man of the file many reasons may bee given first because hee commandeth the rest. And as in all other things hee that is to rule, and governe another, ought to haue more knowledge, then hee that is commanded, and governed, so is it in matter of warre. Further as his skill, so his valour, ought to bee most: that his example may incourage and incite the rest. Which is the cause, that other commanders also are placed in front, and in the eye of the souldiers that their valour & forwardnes may breed an honest emulation in the souldiers to doe, as they doe. Besides the first place is most becoming him, that best deserveth, and the more valiant a man is, the more hee deserveth to shewe it in the face of the enemy, thereby to winne himself honor, and reputation. Furthermore, hee may doe best service in the front, by entering into the enemies battaile, and making way for the rest. Not unlike a sword, whose edge maketh speedy passage into the thing, it cutteth, and draweth after it the rest of the iron, bee it never so blunt. In the front, the

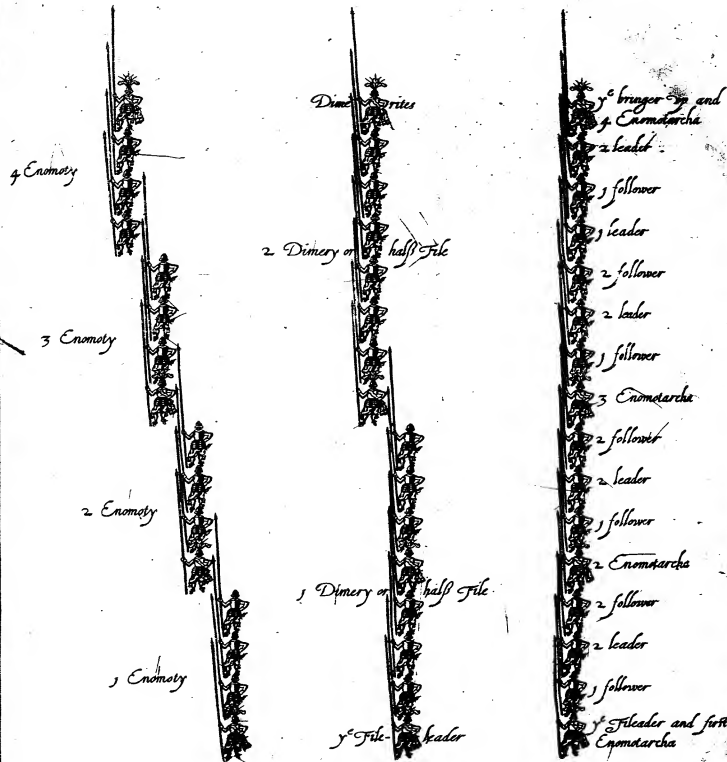
a Plutarch in Perseida.

b Aelian cap. 13.

c Leo cap. 9-71

d Liv. decury 51

rank of the file leaders: give the push to gaine the field. Which reason I thinke lead* Gorgias the first instigator of the Tiberian Heroes Lochos, not to make an entire troupe thereof apart, but to place it man by man in the first rank of the Phalanx. Lastly the sight of the file leaders, being the choice of the armie, both for stature, and resolution (for so Aelian would haue them) * breeds a terror in the minde of the enemy. Who, seeing such gallants in the front, haue cause to imagine that the rest of the armie, which they see not, is like to those they see. And, being never so valiant, they had rather haue to doe with weak, and relenting then stout, and resolute adversaries. As at the battaile of Canne * Annibal answered one, that brought him newes, that the Consul had commanded the horse men to alight, and fight on foot, how much rather would I, quoth hee, hee had delivered them bound into my hands. I haue heard many hold opinion, that the manner of the Grecians, to bring their best men first to fight, is contrar-



by to the institution of the Romans, who held the Triarij (theire eldest, and best souldiers) in the rear, and brought them not to ioyne, till both the Hastati, and Principes were beaten, or retired. But if wee consider the diversity of both their embattailings, wee shall see noe great difference, or at least wee shall see, that the reason of placing their best men was not much different. The Gracians in framing their fourfold Phalange made in length an even front of 14104. files. The files were 10. deepe, and the best men therefore in front, because being placed in the middle, or in the reare, there would have beene no use of their valour, and the Phalange might have bene broken, before it had come to their turnes to fight. The Romans contrary wise, in ordering a Legion, made many maniples, and gave the front to the Hastati, the middle to the Principes, the reare to the Triarij. Nowe the Triarij being ordered in the Reare, might at the beginning bee brought to fight in Front, if need were; being noe need, they kept their place, till their Generalls found it fit to call upon them. So then this is the difference. The File-leaders of the Gracians had the Front, because otherwise in so deep a body, as the Phalange was, they could not have come to fight: The Triarij might alwayes have bene employed in Front, in flanke, or in the reare, as pleased the Generall. And that the Romans also in their severall Maniples placed their best men in Front, I cannot doubt. There stood the Centurions, which were the leaders of the Maniples, and in reason were to bee seconded with the best men under their command. * C. Crassus may serve for an example whose being noe Centurion, but an Equeare, in the battail of Pharsaly betwixt Cesar & Pompey, bidde his Manipulers (they were of the Maniple, which hee once commanded) to followe him, and said hee would make his Generall glue him thanks alive, or dead. *Tet must I confesse, what the front was not the proper place of the Equocares. But hee chose the front, and held in a place worthy of his valour. It is said of C. Cæsar that, when hee fought with C. Antoninus, hee placed in the front of his army, all the chosen Centurions, and Evocates, and besides of common souldiers such, as were best armed.* * Livy speaking of a fight betwixt the Romans, and the Latines, and describing the forme of the Roman battail, after hee had limited the place of the Hastati, & Principes, writeth thus of the Triarij. After the ensignes (hee meaneth the Standards of the Legions) not the Ensignes of Maniples, were ten other Maniples, whereof every one had three Ensignes. The first Ensigne led the Triarij,ould souldiers of tried valor, the next the Rorarij, not soe well esteemed for strength in either age, or deeds, the third the Accensi, a troupe of left trust, which was the cause, that they were cast in the reare. The Accensi were put in the reare, because there was noe great opinion of their valor: the Triarij had the front, because they were ould souldiers, and had bene sufficiently tried. See then in dividing of this arme into small bodies, or battailions, the Romans differed from the Gracians: in placing the best men of their maniples in front, they observed the same manner, that the Gracians did in placing their file-leaders in the first ranke of the Phalange.

2 A verse] I have translated it thus a verse. The more a small signification is a name of any thing placed orderly. * See Xenophon applich it to trees, which were planted in order, one after another, and * Plutarch in the standing of dancers one after another in a dance, as our souldiers are placed one after another in file. * Valerius Pollicar. lib. 1. aduersus legem, that there were files, and ranks in Choro: that is in dances upon the stage. * But Suidas saith it was commonly taken for a line, which was read from the left to right hand. And so by the same a verse, as wee read at this day, and as they read, when Ælian wrote this treatise, rather resembleth a ranke than a file, because in a ranke men stand side to side, as words doe being placed in a line. Yet because the word is received by use in that other sense, wee must like wise admitte the same.

D 4

3 A decury]

a Cesar de belli.
lib. 1. cap. 14.

b Sallustie com.
in. Cæsar. lib. 1.

c Livij decuria
lib. 8. cap. 14.

d Xenon in Oe.
convers. lib. 10. c.
hustis in kind
lib. 1. c. 14. ad
4. cap. 14.

e Suidas. in ver-
bo, sizes.

The Tactics

or to eight, or to sixteen, as you shall find most convenient, that being bound one to another with mutual acquaintance, they may fight one for another in battaile and bee more valiant against the enemy. But you shall doe more wisely, if when you are to joyne, you place by others by brothers, & friends by friends. For when hee, that fighteth, hath an entirely beloved friend standing next behind him, hee must of necessity hazard himselfe with more egerneesse for his friends sake. And the other being ashamed not to requite one, that sustaines such danger in his behalfe, will hardly bee brought to forsake his friend so well deserving, and first betake himselfe to his fecte. *The same is the advise of Onesander, and was much practised in ancient time. The Lochos Hieros, or Holy-band, of the Thebans (whereof I spake before) consisted all of friends; that had bound themselves one to another in friendship. With this Holy-band Pelopidas gave the first disgracefull overthrow to the Lacedaemonians, that ever they had. Of this band Plutarch writeth, that it was never beaten untill the battaile of Cheronæa, when Philip the father of Alexander vanquisheth the Athenians, and Theban forces both together.* After which battaile Philip surveying the dead bodies, and coming to the place, where these three hundred lay, all close mingled one with another, and strooken through with the Macedonian pikes, hee wondred greatly, and hearing that it was the band of louers, and belovd, wept, and said, evilly may they perish, that suspect any filthines in deede, or suffering, to have been practised amongst such men. *Cyrus the elder had his Homotimos nourished up together, and Alexander his Hetairios, whose extraordinary service appeared in all their battailes.* *Diodorus Siculus writeth of Sesoosis the Egyptian King to this effect: at the birth of Sesoosis his father did a magnificent and royall deed. For gathering together all the children of Ægypt, that were borne the same day, and setting over them some to nourish and governe them, hee gaue the same education, and institution, to them all, conceiving that they, that were brought vp together, & partakers of the same liberty, would become the best affected, and most assured fellow helpers in warre. This was the indgement of Myris, the father of Sesoosis, King of Ægypt, in providing assured assistance to his sonne for the conquering of the whole world, which by certaine blinde propheties was promised him. Now what little trust there is to bee given to men, that are not acquainted one with another, Pompey that great Captaine of the Romans sheweth in his epistole Domitius: For men, saith hee, are not quickly to be assembled hether by musters, and if wee had them, you are not ignorant how much they may bee relyed vpon, being vnacquainted to fight against ourd Legions. Tet hath Leo another mixture in his files. For hee would have theould, and new souldiers put together in one file. Least saith hee, theould being by themselves alone, prouew weakke, and of small force, and the yong disorderly, having little experience. For the one, albeitould, yet are well acquainted with service, the other albeit young, and valiant, yet are vnskilfull.*

For the Enomoties, dimerie, and files, see the figure.

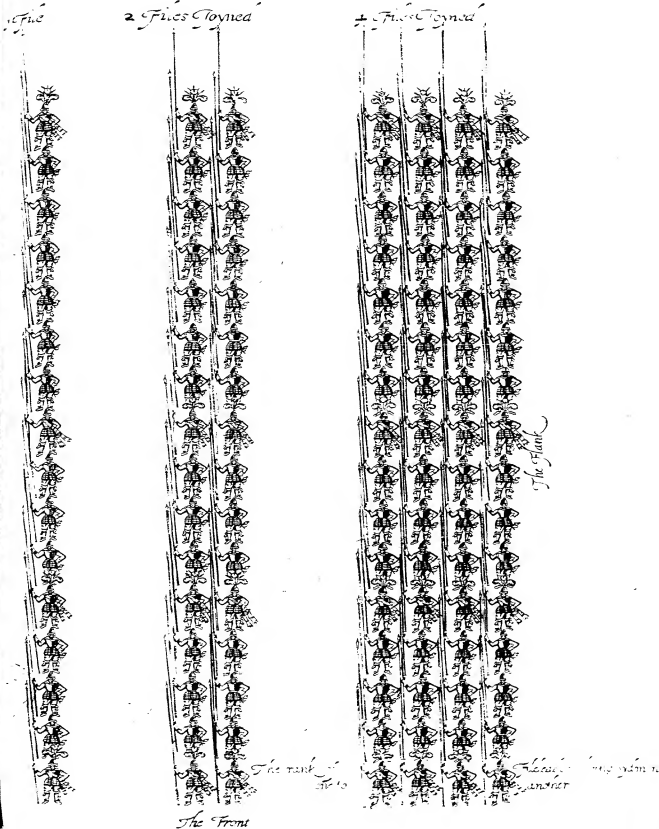
Joyning of Files.

CHAP. VI.

I Joyning of Files, is when one file is layed flank-wise to another, the Leader of the second file to the Leader of the first, and the follower of the second File-leader to the follower of the first, and so the rest. Every man that ranketh

is

Cap. 5.
Joyning of Files



is called *Parasutes*, as for example the *Leader* of the second file, to the *Leader* of the first, and so their next followers, and the rest. As often then, as the second file, the third, the fourth, and so the rest are layd flank-wise to the first, it is named *Joyning of files*.

Notes.

1 [Joyning of files is] A file of it self will worke little effect against an enemy.

For what can a man alone in front doe? Cyrus in Xenophon writeth, that whereas the Egyptians stood a hundred in depth, they had beene in depth a thousand, for six, seav, mee, should have the sever hands to fight against. The ranks bringeth the multitude of hands to fight. And it is held, that the more hands aew the more ready brought to fight, the more is his advantage, that bringeth them. This is done by joyning fil together, out of which joyning ranks spring, and ranks the more they increase, and extend themselves in length, the more hands are ready to encounter the enemy. Now, as it was said in the former chapter, that files consisted of leaders, and followers, from the first to the last. So it is in this chapter said, that ranks consist of side men from one end of the length of the Phalange to the other: Fewe, or many men, placed side to side in a right line make a ranke; as in two, or three files joyned together, there are sixteen ranks of two, or three men in a ranke. And the two or three file-leaders make the first ranke, their followers the next, and so the rest untill you come to the sixteenth. The like falleth out in more files. b Virbicius saith that the file leaders make the front (as they terme it) of the Phalange, which they call also the first ranke. And further, hee saith, they, that runne in an even line betwixt the two wings, the right, and the left, are said to be Parasutai, or sidemen. Likewise the last ranke is called Oura, or the reare, and the commander Ouragos, the bringer-up. So Virbicius agreeing with Ælian. Now, out of these two chapters, is a cleare distinction of the names of souldiers, that by reason of their posture, or place, in battaile make the diversitie of files, and ranks. They, that make files are Protostatai, first standers, & Epistatai, after standers, which are by us commonly called Leaders, and followers. For the same saith Ælian make the file from the beginning to the end. Parasutai, side standers, or, as we terme them, sidemen, make the ranks. And if you measure the length of the Phalange, you doe it by number of men in the ranke, if the depth by number of men in the file.

a Xenophon writeth
libre 1. cap. 10.

b Virbicius, magis
in his wordis
con.

of a Phalange, the length, and depth thereof: of rankings, and files; the division of the Phalange into wings: the place of the armed foote, of the right-armed, and of the Horse.

CHAP. VII.

THE whole bodie of the multitude of files is termed a *Phalange*: whose length is the first ranke of file-leaders, and is named, the *front*, the *face*, the *edge* of the battaile, the *ranke*, the *mouth*, the *Commanders*, the *fore-standers*, & the *head* of the files.

As much of the *Phalange*, as stretcheth backward from the *front* to the *reare*, is named the *depth*. The bearing straight forth of *side-men* in length, wher

ther they bee *Leaders*, or *followers*, is *ranking*. And the standing of *Leaders* and *followers* directlie in a line in depth, is *filings*.

A *Phalange* is divided into two whole parts beginning at the middle section of the *front*, and holding on cleane through to the vttermoſt parte of the depth; whereof the one half is called the *right wing*, and *head*, the other half the *left wing*, and *tail*. The two fold ſection it ſelf, that divideth the length, hath the name of the *Naxel*, and the *Mouth*. The *Light-armed* are placed after the *Phalange* of the *Armed*, and behind them the *Horse*. Yet if occaſion require, both *light-armed*, and *Horse* are other wiſe diſpoſed, as after in this diſcourſe will appeare.

Notes.

THE whole body of multitude of files is termed a Phalange] *Joining of files makes ranks, and a ſufficient number of files, and ranks together, make a body, which is called a Phalange.* For that name is given to any entire body of an indiſſerent greatneſſe, compacted, and united for fight. *Heſychius deriveth the originall of the word Apo tou pelas allelois inai; from the ſtanding of the ſouldiers in battaile neere one to another. Suidas in the ſame ſence, albeit hee differ a little in words, ſaith, the Phalanges are ſo called apo tou pelas inchi, of approaching one neere to another. The great Etymologicon goeth yet a little further, and ſaith, that Phalanges are as it were Phalanges para to pelas kai eggyis cinai, as it were Pelangys. Theſe are the conſiderations about the originall of the name. Which of them is trueſt, is not greatly to the purpoſe. It is enough to underſtand, in what ſence the word Phalange is commonly taken amongſt Tactics writers, who, as I ſaid, in a general ſignification call any great body of armed gathered together, and united for fight, a Phalange. See Caſar nameth the battaile of the Helvetians, into which they caſt themſelves, when they fought againſt him, and likewiſe the battaile of Arioviſtus, a Phalange. Soſſakeſh Xenophon of the Platium, or ſquare hollow battaile, into which the Gracians, when they fought with Cyrus the younger into Perſia, ſhewed themſelves at their returne out of Perſia. And the ſame Xenophon ſaith, the horſe of the Gracians, when they were to encounter the Perſians, ordered themſelves four in depth, in forme of a Phalange. And Arius, that the Perſians at the River Granicus were ordered in a long Phalange, and Xenophon againe diſcourſing how Iſphrates exerciſed his navie, when hee expected to fight with the Lacedemonians, ſaith, hee ſometimes lead in a wing (that is in a large depth) ſometimes in forme of a Phalange, in a broad front. The firſt inventor of the Phalange is thought to be Pan the generall of Bacchus his armie. Polyænus ſaith, Pan was the commander of Bacchus his armie. This man was the firſt that invented the order of a battaile, called it a Phalange, and parted it into the Right, and left wing. For which cauſe Poets ſaith, that Pan carrieth two hornes vpon his head. Beſides hee was the firſt, that by flight, and cunning caſt a feare vpon his enemies. For when Bacchus, incamping in a hollow foreſt, was advertiſed by his ſpies, that an infinite number of enemies were lodged one the further ſide, hee began to be afraid. But nor Pan who commanded the ſame night the armie of Bacchus to give as great a ſhoute as they could, The Rocks and hollowneſſe of the foreſt rendered it againe double to the enemy, & made the ſhout of a greater armie, than Bacchus had. Where with the enemy falling into a fearefull ſort with, in honour of this ſtrategeme nee ſaith, that Bacchus is Pans love: & the cauſe of night-fears, which fall vpon Armies, were attributed to Pan.*

So farre Polyænus about the inventor of the Phalange. The number of the Phalange is not alwayes one. It may conſiſt of ten thouſand, twenty five thouſand, or as many, as you liſt. Antigonus the King of Macedony had his Phalange of ten thouſand. Ptolomæus King of Egypt, of twenty five thouſand. The ten thouſand Gracians that went with Cyrus into Perſia are called a Phalange. What number the Helvetians, and Arioviſtus, had in their Phalange, is not preciſely ſet downe by Caſar. Yet it ſeemeth by Caſar, that the moſt parte of the fighting multitude of the Helvetians caſt themſelves into a Phalange, and thoſe of Arioviſtus likewiſe. But Ælians Phalange is reſtrained to a certaine number, as the next following Chapter will teach.

The length whereof] The length of the Phalange is to be accounted by the ranke not by the file. The file is but ſixteen men deep. The ranke from the point of one wing to the point of the other containeth a thouſand, and twenty four men in Ælians Phalange. So that the files being ſhort in compariſon of the ranke, it is reaſon, that the length of the Phalange be meaſured according to the ranke, not to the file. Suidas agreeth with Ælian ſaying, that the length of the Phalange is the firſt Syntagma (the firſt ranke) of file leaders, which is ordered in a right line, ſtretching from one wing to another, and is called the face, and the mouth, and the front, ſtretching from the firſt-filing, and the firſt ſtanders of the battaile. The next rowe, lying Parallel to this, is called the ſecond ranke, and the third, the third ranke, and ſo the reſt. The length is termed in Greeke Mecos, to which is oppoſed the depth, which is named Bathos. Neither is there in true account any other dimenſions in a Phalange, beſides the length, and the depth, which are in this chapter mentioned by Ælian. Other names are given in Greeke writers ſometimes, but they ſignifie either the one, or the other.

3 Is named the depth] As the length runneth along by front from one wing to another, ſo the depth beareth backward from the front to the rear. The depth is properly called Bathos, as I ſaid. And Bathera Phalanx, is a deepe Phalange. And Arius ſaith, Alexander ordered his Phalange as Bathos, in depth. And Polybius, that the Romans made their battailes much ſhorter then before, but much deeper, Bathyteran. And as it is called Bathos, for the moſt part, ſo it is by Leo etoi Pachos, in two ſeveral chapters of his Tactics, not in reſpect of the file it ſelf, which is no more then a long line, as it were, and carrieth neither Thickneſſe nor breadth, but in reſpect of the Phalange, the depth whereof is meaſured by the file. And in the fourth, the twelfth, and fourteenth chapters hee termeth the depth of the Phalange it ſelf (Thickneſſe) Pachos alone with out adding Bathos; ſhewing thereby, that Pachos alſo ſignifieth the dimenſion of the Phalange from the front to the rear. But ſome ſome are of opinion, that Platos, breadth, ought to be read in thoſe places inſtead of Pachos, Thickneſſe, they perſwade mee not to be of their mind. For Ælian ſaith, that they grew an Attenuation, or Thinning, (which hee callith Leptynismos) to the Phalange: and that cannot be underſtood, unleſſe there were in it a kind of Thickneſſe before. And to make it more plaine, hee ſaith, that this Leptynismos is, when the depth of the Phalange is either cut up and from ſixteen men it becometh a leſſe number. So that the Thickneſſe of the Phalange is the full ſixteen, which is alſo the depth, and making of it Thinner is to leſſen the depth. To a Place Platos is alſo attributed, a Place being only ſuperficiell, which conſiſteth of Longitude and Latitude. So Polixenus ſpeaking of a valley, wherein an ambuſh was layde to enſure Alexander, ſaith, the length ſtreched farre out, but the breadth, Platos, was narrowed to four ſquare leagues. The name of Platos is likewiſe given to a place by Polybius. But to ſay the truth

a Caſar de bell. gall. lib. 6.
b Xenoph. de reſ. Cyri. lib. 3. p. 100.

c Xenoph. lib. 6. c. 11. p. 100.
d Arius lib. 1. c. 1. p. 100.
e Xenoph. lib. 6. c. 11. p. 100.
f Polyæn. lib. 1. c. 1. p. 100.

g Polyæn. lib. 1. c. 1. p. 100.
h Arius lib. 1. c. 1. p. 100.

e Suidas in thes. d. 100.

c Died. ſicil. lib. 2. c. 1. p. 100.

d Arius lib. 1. c. 1. p. 100.

e Polybius lib. 1. c. 1. p. 100.

f Lycop. c. 1. p. 100.

g Leo c. 1. p. 100.

h Leo c. 1. p. 100.

i Leo c. 1. p. 100.

k Leo c. 1. p. 100.

l Leo c. 1. p. 100.

m Leo c. 1. p. 100.

n Leo c. 1. p. 100.

o Leo c. 1. p. 100.

p Leo c. 1. p. 100.

q Leo c. 1. p. 100.

r Leo c. 1. p. 100.

s Leo c. 1. p. 100.

t Leo c. 1. p. 100.

u Leo c. 1. p. 100.

v Leo c. 1. p. 100.

a Leo c. 7. §. 2.

truth Platos in a Phalange rather significeth the length, then the depth, as appeareth by *Ælian* after in the fourth and fourth chapter. And *Leo* calleth the front of the Phalange Platos, and when he would have the front enlarged, or doubled, hee giveth this word of direction Platon non pròs ta amphòtera mère, enlarge the front on both sides.

4. The right wing] That which in the English tongue is called a wing, is termed in Greeke *Keras* a horn. Wee in our warres of ancient time divided our armies into three parts, The vantage, the battaile, and the reare-ward: and, when we came to fight, set them for the most part in an even front, the battaile in the middle, on the right hand, the vantage, which was called the right wing, on the left, the reare-ward which was called the left-wing. Properly enough for our embattailing. For the battaile is, as it were, the body, and the vantage-ward, and reare-ward, are the wings, which in a manner stick out from the body, and where by the body is supported: that, that we call wings, the Grecians, and Romans called horns in the battaile. The word *Keras* significeth a point bearing out from the height, or ends, of any thing. It is used for the toppe of Rocks, and of promontories, and such like. And in a Phalange it properly significeth the two points (the right and the left) of the wings. The English word wing I am faine so to retain, because it is familiar, and in use. *Ælian* here will have the wings to stretch out from the middle section to either point (the right and left) of the Phalange, under which appellation must fall to the right wing the whole space, that beginneth at the middle intervall, and runneth along to the corner of the battaile on the right hand, to the left, all that is comprehended betwixt the same space, and the left corner of the battaile.

5. The two should section] In Greeke it is named *Dichotomia*: because it parteth, and divideth the Phalange into two even parts, beginning at the front, and stretching out to the reare. And *Ælian* in the tenth chapter of this book nameth it *Apotome*. But heere hee speaketh of no more intervalls, or partitions, of the Phalange, then of this one in the midst. I would thinke there should be more. *Onofander* saith: let there be certaine intervalls in your battaile, that if your enemy advance, your light-armed after they have spent their mislike weapons, and before the Phalange joyne, may retire leisurely in the intervalls, and without disorder come behinde to the reare. For it is not safe for them in retiring to fetch a compass about the whole arme, or to turne in againe on the outside of the wing. For the enemy, halting to come to hands, would easily prevent, and intercept, them in the midst: so that they neither should be able to break through the armed, already closed for fight, and falling upon their owne weapons, they must needs disorder their owne people, every man after other seeking to finde a way through them to escape the danger hee is in. Thus much *Onofander*: from whom we may learne, both that there ought to be more sections in the Phalange, then one, and that the institution of them had this cheefe end, to receive the light-armed in their spaces, after they had skirmished with the enemy, and were by them forced to retire. I may adde, that *Ælian* placing the light-armed in the reare of the Phalange if you give but one section unto it, it will be as hard for them, to advance, and frue, before the front, as it will be to retreat after their service done. It seemeth, that *Leo* giveth three intervalls to the Phalange of the ancient Tacticks. He saith: they opposed the bodies of the armed against the enemy, and divided them into four parts, the right, and left, and the middle-right, and middle-left parte. Making so many parts, the parts must be distinguished (as I collect) by intervalls, which ought to be one after

b Onofander c. 10. Leo c. 5. §. 10.

a Leo c. 5. §. 10.

after the first body of the right-wing, another after the second, which is the middle section, the third after the third. And the Third section is bound with the fourth body, which maketh the point of the left-wing. For if the Phalange were whole, and entire, without more intervalls then one, how could there be three parts? For esteeming them by Phalangarchies, without leaving spaces betwixt, it could not be so, there were but four parts of the Phalange, considering, that as well the Merarchies, Chilharchies, Pentecostarchies, Syntagmatics, as parts of it, as the Phalangarchies. But being distinguished by partition of intervalls, the four Phalangarchies become four parts, namely, the right, left, middle-right and middle-left: as *Leo* heere termeth them. The same *Leo* speaketh after more plainly, enjoying his generally to separate, and disjoine Diachorizein the whole number of his arme into four parts. For, as *Chorus* significeth a part or severall, so *Diachorizo*, being derived from it, significeth to put asunder, or set a part. *Suidas* is yet a little more cleare. A Phalangarchie, saith he, is two Merarchies of foure thousand and ninety six men. This as some saye is the section, *Apotome*, and the commander *Strategos*, but now hee is termed *Phalangarches*. *Suidas* maketh the wing to have a partition or section, and saith, some call a Phalangarchie by the name of this section. Before we heard out of *Ælian*, that the wing (right or left) did stretch out from the middle section to the outwardmost point of the battaile on either side. And as the middle section divideth the Phalange in two parts, which are called wings, so this section (spoken of by *Suidas*) being in the midst of the wing divideth the wing into two parts. To call a Phalangarchie (which is a body consisting of foure thousand and ninety six men) a section, is, I confesse, an improper speech, but tolerable notwithstanding, considering that the whole fourfold Phalange is composed of the four Phalangarchies, and that the section of the right-wing beginneth at the left hand file, or inward point of the right hand Phalangarchie, and endeth at the right hand file of the second Phalangarchie. And we are not to expect the same exactnesse of speech from *Souldiers*, that is common to men skillfull in the liberal sciences. *Souldiers*, that profess action, have their end, if they be understood of those, they command. Actions are commended, that cleve not the precepts of their arts with elegant, fit, and exact termes. Seeing then the beginning of the section of the wing is at the flanke of the first Phalangarchie on either side of the Phalange, wee may after a sort terme the Phalanga chie a section of the wing, because an intervall in either wing, which in reason ought to be in the midst of the wing, and to ly between the two Phalangarchies. For so many there are in one wing. *Polybius* telleth of *Philopamen*, that, fighting against *Antichandus* the Tyrant of *Lacedemon*, after hee had placed the light-armed, the *Lancers*, and *Thyrians* in front, one front, hee added in the same right line the Phalange distinguished into bodies according to Merarchies and divided by severall distances. I translate *Spieredon* distinguished into bodies, because *Speira* significeth a military body amongst the Grecians, and is by the Grecians, that wrote the Roman histories, used sometime for a Legion, and sometime for a Cohort. And it seemeth that *Spieredon* is heere by *Polybius* put in the same sense, that *Eis Spiran* is by *Plutarch*: who mentioning the reformation touching officers military, who he the same *Philopamen* brought in amongst the *Achaians*, writeth thus: their manner and forme of embattailing was not usually parcelled out *Eis Spiran*, that is (as I interpret it) in severall bodies, but using a Phalange.

a Leo c. 5. §. 10.

b Suidas in the word Phalangarchie.

Polybius lib. 2. c. 22.

a Plutarch in Platon.

Phalange, which had neither protection of pikes, nor closing of targets in front (as the Macedonian manner is) they were easily foiled, and broken, by the enemy. The meaning of Plutarch is (as I conceive) that the Achaians in former times used to order there Phalange in a continued length without intervals which Philopamen reformed, and taught them to make divisions by intervals. And the practise of Philopamen is the best interpreter of his own counsel to the Achaians. This practise Polybius setteth downe, to bee the division of his Phalange Kata tele speiredon en diafemasi into bodies distinguished by intervals according to Merarchies. Polybius also, to shew, what bodies they were, useth the word Tele, which I translate Merarchies, having my warrant out of ^a *Alian*: who saith a Merarchie consisteth of two Chiliarchies, and containeth two thousand and forty eight men, and a hundred and twenty fower files; and addeth, that it is of some called a Telos, and the leader a Telarch. A man may doubt seeing Philopamen make an intervall betwixt every Merarchie, whether hee made seven divisions, or no: For in *Alians* Phalange there are eight Merarchies, betwixt every of which is a distance were, there must needs arise seven intervalls. To cleare this doubt wee must understand, that the Phalanges of the Gracians were not alwaies of the same number, as I noted before. *Alians*, and the Macedonian Phalange, consisted of sixteen thousand and odd. Antigonus had ten thousand. Demetrius eleven thousand. Other had more, the Lacedemonians less, and likewise the Gracians for the most part. And it seemeth, the Phalange of Philopamen was no more, then eight thousand, and odd, in which number there are but foure Merarchies. As *Alians* Phalange comprehending sixteen thousand and odd, wherein are foure Phalangarchies, hath likewise three divisions by Phalangarchies. And yet in this Phalange of Philopamen, if you account the file to have but eight men (as the most Gracians used in their files to have) these foure Merarchies will possess as much ground in front, as the Phalangarchies of *Alians* Phalange doe, the file being sixteen. Neither is it new to figure out the bodies greater, or less, according to the number of the Phalange. ^b Leo commandeth his Generall, when the number will not reach to sixteen thousand (the number of the old Phalange) to bound notwithstanding sixteen men in a file, and to divide his Phalange into foure equal parts by intervalls, excepting some few, which hee would have reserved for other uses. To conclude *Alian* him self seemeth to acknowledge more sections, then one, when in the tenth Chapter of this booke hee speaketh of the middle section mese apotome. For this word middle being a relative, can not bee understood with out two other at least, which are placed on either side. And all the figures, that I have seen, of a fourfold Phalange allow three sections, and no more, that is to saie, one in the middle, and the other two in the wings. What the distance and dimension of these sections ought to bee, I finde not set downe. But, if I might have leave to conjecture, I would thinke, they ought to bee large enough for a troupe of horse, framed wedge-wise, after the Macedonian manner, to passe through, the last ranke whereof being fifteen (as appeareth in the twenty chapter of this booke) and the horse placed in the reare of the light-armed it is needfull, if upon any occasion they were to bee drawn through to serve in the front, the distance of the section should bee sufficient to give them passage without disorder. And I am the rather confirmed in this opinion, because I see the intervalls betwixt the Roman maniples so proportioned, that the Principes might passe through shoof of the Hastati, and the Triarii through those of the Principes. But I proportioned out the intervalls to the horse, not to the light-armed, for that the light-armed may bee divided into severall bodies without inconvenience, but any breaking of the horse.

^a *Alian* lib. 2. cap. 20.

^b Leo cap. 4. §. 42. 43. 44. 45.

horse wedge breedeth a confusion in the whole troupe. Yet where a troupe of horse may find way, there may a Centurie, or Colours, of light-armed finde also way.

6 The light-armed are placed after. The light-armed were diversly placed, sometimes before the front of the Phalange, which kind of placing is afterward called Prataxis, sometimes on the wings, and it is called Hypotaxis, sometimes betwixt the files of the armed fronting in a right line with them, and it was called En-taxis, sometimes in the reare after the Phalange, which was called Epitaxis. All these are spoken of by *Alian* hereafter in this booke. There is another kinde of placing the light-armed, when they are throwne into the midst of the battaille, being hollowed for that, and other purposes. Hereof *Alian* likewise treateth in this booke hereafter. And albeit the most usual embattailing of them hath been in the wings, yet the bestowing in the reare according to *Alians* minde hath also advantages. First it concealeth their number, which because they are shadowed with the pikes standing before, can hardly bee discerned. Then it is easie from the reare to drive them to any place of service without disorder, bee it before, on the wings, or behind the reare. Further, it will not bee easie for the enemies horse to charge them, the armed standing before for a sure defence. Lastly, from the reare they shall bee able at all times to annoy the enemy, before the battaille joynes, as some as the battaille joynes, and all the time of fight. Neither doth this manner of embattailing want examples of the old historie of the Gracians. The embattailing of Cyrus the elders armie, in Xenophon, both the light-armed in the reare. I will set downe the effect of Cyrus words at large because they containe the ordering of an armie to fight according to the judgement of Xenophon. Cyrus then being to trye a battaille with Cræsus thus directeth his Commanders: you, saith hee, Araspes take your place in the right wing, as you now doe, and you the other Myriarches, as you are accustomed. For when the fight is once a foote, noe Chariot may change horses, and command the Taxiarches, and file-leaders, to order their files every one divided in two parts Phalange-wise, that is each half fronting one with another in a right line. A file containeth fourean twenty men. Then saide one of the Myriarches, doe you thinke Sir, that wee shall bee able, in this order, to encounter to deepe a Phalange, as the enemies? Cyrus answered, the Phalanges that are deeper, then may with their armes reach the enemy, are they fitt thinke you either to annoy the enemy, or profite their friends? For my part I could wish those, that are ranged in depth, to bee in depth a thousand. For so should wee have the fewer to fight with all. The number, that I give for the depth of the Phalange, I doubt not, but will entirely serve for use, and maintaine a joynnt fight in every part. The Darters I will place after the armed, and after the darters the Archers. For who will set them in front, that confesse themselves unable to maintaine a fight hand to hand? Howe then will they hold their ground, if they bee set before the armed? but being in the reare, some with darts, other with arrows, sent over the heads of the armed, will greatly endamage the enemy. And it is cleere, that wherewithall soever an enemy is endamaged, with the same a mans owne side is eased, and relieved. You therefore order your selves, as I have appointed. As for the captaines of the Targetiers I will haue them, and their files, stand likewise next the armed in the Reare, and after them the Archers. And you the chiefe Commander of the Reare

^a *Alian* cap. 21.

^b *Alian* cap. 20.

^c Xenop. Cyrop. lib. 2. cap. 21.

right wing, because on the left, the Phalange was secured by the River; before the Platium, that being overlaid with the multitude of this enemy, they might have a free retreat to the foot. The same Alexander, when he was to fight the Battaille of Issus with Darius, as long as he was in the flight, marshalled his horse after his foot. But in marching forward, coming to open ground, when he might give full length in his Phalange, he placed his horse on both the wings. But the reason of sitting them behind was in the streightness of the place: and he being incertaine how near the enemy lay, was loathe to put them to hazard, before they had liberty of grounds to order themselves, and might have assistance of the foot. For otherwise it was an ordinary matter in marching (as in the manner also at this day) to dispose the horse half behind, and half before. ^{b Xenoph. lib. 1. c. 10. p. 117.} I will content myself with one example. When Agagilaus returning out of Asia, passed through Theffalies, the Theffalians, allies of the Thebans, followed him, and sought to endamage his armie to their uttermost. Hee had before disposed his march into a Platium, with the horse half in front, and half behind, now when the Theffalians ceased not to molest him, by falling upon his reare, he sent to the reare all the horse of the vanguard, excepting those, that attended his person. Either party prepared them selves to fight. The Theffalians holding it not sure with horse alone to encounter armed foot: turning about their faces, began leisurely to retire, and the Lacedaemonians slowly to followe, Agagilaus, perceiving the error of both, sent the best of his horse, that were about him, commanding them to signifie to the reft, that they together should goe, and charge the Theffalians with all speed, and give noe repite to them, to turne their faces. The Theffalians contrary to their expectation being hotly charged, some fled, other some turned about towards the enemy, other some endeavouring to turne, were surprised by their enemies, that by that time were come up to their flankes. Nowe for the reason of ^{b Livy deas. lib. 4. c. 10. p. 117.} Alians placing the Horse in the reare, I have no more to say, then, that from thence they might bee sooner drawn to all places, front, flanke, or where soever the enemy is like to distresse vs. For it hath bene the forecast, of all generals to fashion their battails according to the figure the enemy hath before chosen. Examples are so plentifull, I neede not allege many. Onely I will remember one latine story of placing horse in the reare. L. Censulus, and L. Atanlius Acidinus in Spaine being to fight with the Illegeres, and Ansetans, and other Spaniards, that had revolted from the Romans; in this very kinde of placing horse in the reare imitated, and gotte the advantage of, and defeated their enemies. ^{b Livy deas. lib. 4. c. 10. p. 117.} Livy hath the story, and writes thus in effect: The next day at the rising of the sonne the Spaniards being all armed, and set in order, shewed their battail, about a mile from the Roman campe. The Ansetans were in the middle, the Illegeres held the right wing, other obscure people of Spaine the left. Betwixt the wings, and the middle parte, they left broad intervals, to give passage to their horse: (when time should bee) to send them through to charge. The Romans Embattailed after their wonted manner, Onely then imitated the enemy, in leaving open waies, for the horse betwixt the legions. Lentulus imagining that party, and none other, should have use of their horse, that first possessed the intervals of the adverse battail, commaunded Cornelius the Tribune to give direction to the adverse battail, commaunded through, the foot on both sides came to blowes, and the fight was hard, when the Roman horsemen passing through the spaces, and falling upon the middle of their enemies at once disordered the battail of foot and shut up the waies against the Spanish horse; by which meanes, after noe long fight,

fight, the enemy was utterly defeated. Where Livy saith the Romans embattailed after their wonted manner, his meaning is they ordered them selves in Maniples, or Battalions, as we now terme them (for that was their wont.) But when hee addeth, they imitated the enemy in leaving open waies for the horse, betwixt the legions. Wee must understand that a legion was thus embattailed: First they divided their legion in to thirty Maniples, ten of the Hastati, ten of the Principes, and ten of the Triarii. The ten maniples of the Hastati, they set first in an even front, leaving so much distance, or void ground betwixt every Maniple, as a Maniple in self tooke up in standing. At a reasonable space behind, were the Principes placed in as many maniples: but soe that their maniples stood directly behind the void spaces of the Hastati. And against the bodies of the hastati, they left likewise spaces in the Principes to the end, the Hastati being overlaid, might retire without spaces: or else themselves might advance against the enemy, through the intervalls of the Hastati. Lastly at a larger distance behind these were the Triarii set, and divided with spaces betwixt every maniple, which spaces were great enough to receive the Principes, in case they retired also. Now the Horse being ordered in the reare after the Triarii, if from thence, they had gon to charge the Enemies front, through the spaces of the Triarii, they must of necessity, have fallen upon the Maniples of the Principes whome were set directly against the intervalls or spaces. To give therefore free passage to their horse, the Roman Generals removed the maniples of the Principes from their ordinary place, and bestowed them, in a right line, after the maniples of the Hastati, and made an open lane, (as it were) from the reare of their battail to the front. So that nothing hindered the horse, but they might freely fly up to, and fall upon the enemies front. And yet I take not Alians meaning, to be, that the Horse set in the reare, should during the time of the fight still remaine there. For soe would noe great service bee had of them. But hee placed them there the rather to avoid confusion in ordering the foot. And that after their embattailing they might bee led from thence to any place, front, or flanke, or where soever they might yield most use. For in the fifthem and twentieth chapter, he would have both light-armed, and horse for placed, that they might answer all attempts of the enemy. And in his caution following, hee saith, if occasion require both horse and light-armed, may bee otherwise placed. That they were orderly placed in the wings, I have before shewed. The examples declare they were placed in the reare sometimes:

Of placing in the front there are also examples. The Lacedaemonians at the battail of Leuctra against the Thebans placed their horse before their Phalange, and tried their fortune with them, and were beaten, before the foot was joyned. The Persians at the River Gracivus, esteeming their horse to bee their chiefest strength, opposed them upon the banks against Alexander, that was to passe over, and embattailed their foot behind the horse. And Alexander encountered them first with his horse, before his foot could get over: One example more I will adde to shewe the reason, Why horse are sometimes placed before the front of the Phalange of foot. Eumenes being to fight against Craterus and Nicopolentus, the both great generals, that had served under Alexander in all his wars, ordered the fight thus: Because hee vnder stood, that their Army consisted of twenty thousand foot, the most part were Macedonians renowned for their valour, and showd hand horse, and knewe his own foot, albeit they were as many in number, yett all to bee ramasses of diverse kinds of people, and that his own horse were fewe thousand foot, with exceeded the enemy both in number, and valor, hee determined to hazard the battail upon his horse, before the two Phalanges of foot should come together: Advancing therefore with his horse farre before

his

^a Livy deas. lib. 4. c. 10. p. 117.
The like was done by M. Valerius in the Battaille against the Illegeres. See Livy deas. lib. 4. c. 10. p. 117.
And by L. Papius in the Battaille against the Illegeres. See Livy deas. lib. 4. c. 10. p. 117.
And by Sylla against Aristulus. See Livy deas. lib. 4. c. 10. p. 117.

^b Xenoph. lib. 1. c. 10. p. 117.
See lib. 4. c. 10. p. 117.
Plutarch in v. in Alexander lib. 1. c. 14. p. 117.

^c Plutarch in v. in Alexander lib. 1. c. 14. p. 117.
See lib. 4. c. 10. p. 117.

his foote, hee tooke the right wing himselfe, and gaue the left to two strangers, to Pharnabazus Persian the sonne of Artabazus; and to Phenix a Tenedian. Craterus tooke the right wing of his owne horse, and placed Neoptolemus on the left. And seeing the enemies horse comming forward, with greate fury charged them first, and fought brauely. But his horse failing vnder him, hee fell to grounde, and it being not knowne, whoe hee was by reason of the medly, and throng of those, that gaue backe, and fled, hee was trampled vnder foote, and ended his life after a strange manner. By his death the enemy tooke courage, and encompassing their aduersaries on all sides, made a great slaughter, and the right wing, after this manner, with might overpressed, and put to the worst, was faine to fly for succour to the Phalange of foote. In the left wing Neoptolemus stood directly against Eunices, and the mutual sight of ebbe bredde a greate emulation betwixt the generalls, and a seruent desire to come to hands. And being easily knowne, both by their horse, and other marks, they slew one vpon another; and out of their single fight made away to a consequent victorie. And first they assailed one another with swords, and after fell into an vnlooked for, and wonderfull Monomachy, for being transported with anger, and mutual hatred, quitting the raines of their bridles, with their left hands they each seized, and tooke hold vpon the body of other, which hapening, and the horse continuing their careere, and springing from vnder them, they both fell to the fall, and of the heauines of their arme. Yet Eunices got vp first, and prevented Neoptolemus, striking him on the ham. The wounde was wide, and his strength of footing thereby failed, & soe lay as one, that had noe vfe of his legge, being not able to raise himselfe because of the hurt: notwithstanding, courage overcoming the weaknes of his body, hee lift vp himselfe vpon his knees, and hurt his aduersarie in the arme, and thighes, giving him three wounds. But none of the wounds were mortall, and they being yet warme, Eunices with a second blowe hitting his necke, slew Neoptolemus outright. Whilest these things were doing the rest of the horse fell together. Many were slaine on either side: some therefore falling, other being wounded, at the first the daunger was equall. Afterward, when the death of Neoptolemus was openly knowne, and that the other wing was put to flight, euery one of them fled for himselfe, & made towards the Phalange of foote, as to a strong wall of defence to saue himselfe. This was the issue of the battaile. Wherin Eunices, placing his horse before his foote, because hee held them his strength, and with the winge the hazard of the day, showed him selfe, both in counsell, and action, a greate generall. And Craterus on the contrary side, albeit highly esteemed amongst the Macedonians, as one, that had with great sufficiency served Alexander in all his warres, yet failed in iudgement, in that hee chose rather with his horse to encounter the stronger part of his enimies forces, then with his Macedonian Phalange (which Eunices himselfe feared) to trie his fortune. For as it is a pointe of forcast to knowe a mans owne advantage, and esteeme it: Soe it is no lesse iudgement, to knowe wherein the enemy is stronger, and avoyde to passe, that Craterus his Phalange did him no good, in as much as they neuer came to fight. Craterus failed in both, in that hee neither brought his Phalange to fight, nor yet provided sufficientlie to encounter Eunices horse, which exceeded his in valour, and number: so appeares both, that horse were placed before the front of the foote, and also the storie giues the reason, why they were placed there.

of

Of the number of the armed foote, of the light-armed, and of the Horse.

CHAP. VIII.

NOW are wee to lay out, what number the armed-foote, the light-armed, and the Horse ought to bee, and how particularly ordered, and how vpon occasion the Battaille may speedily be transformed into diuers shapes, & formes, and what discipline vfed for the motion of the severall parts of it. Wee cannot with any probability set downe a precise number of forces to be leved. For as much as euery man is to proportion his leue according to the importance and qualitie of the warre in hand. This yet must not escape vs, that such a number is to bee chosen, as will fit the diuers shapes, and transmutations of our Troopes. As if in case wee were to double, or to multiply, and manifoldly enlarge the length of the Phalange, or els to lessen, and drawe it vp into a narrower roome. For this cause choice is made of a number, that may be reparted into half continually, till you come to one. Hence is it, that most Tactick writers would haue a Phalange to consist of sixteen thousand, three hundred, eighty, and foure armed foote, and of half so many light-armed, and of halfe as many Horse, as light-armed. For 16384. may be reparted continually into half, till you come to one. Therefore for prooffe, and Examples sake this number is admitted. And where wee haue allotted sixteen men to euery file, the whole masse will arise to one thousand, twenty, and foure files.

Notes.

THE Chapter before spake of the parts and dimension of the Phalange, and of the place of the armed, the horse, and light-armed. This treateth of the number that goeth to the Phalange. In choice of which number, Aelian saith consideration is not soe much to bee had of multitude, as of time: for service. For such a number as cannot easily be disposed of for fight, is rather means of confusion, then of order without which no fight can be maintained. Therefore such a number is to bee chosen as will serue.

1 The diuers shapes, and transmutations of our Battaille. Every motion in the battaille makes not a Transmutation, or diversitie of shape. In turning of faces to the one hand or other there is no other shape of the Phalange, then was at first: As a man turning his face any way, the same proportion of lineaments remaines that was in him before. Soe likewise in countermarch or wheeling after the Countermarche, or wheeling is done, euery souldier if he keep his right distance, and remaine in file and ranke; both the place hee had before. And soe noe transfiguration of length or of depth followeth. The motion then, that Aelian meanes to make Transmutation, are Doublings: For whether you enlarge the length, or depth of your Phalange, you straight induce another shape. A long fronted Phalange, and a horse differ much in forme. If you will make of the ordinary Phalange a horse, you are to double your files. Soe often, as your distance convenient for the length of your horse. Then if from the Horse, you would returne it to the first forme, you are not to cease doubling Ranks, till you haue gained that forme: likewise if of your ordinary Phalange, you would make a long fronted Phalange, your ranks are to bee doubled, and by continuing your doubling, you may drawe out what length you will. And contrary

contrarywise, by due doubling your files againe, you come to the first forme: How much you double your Ranks, See much you take away from the depth of your Phalange; as on the other side, doubling of your files, diminisheth the length. For the purpose, your Phalange; sixteen deep, double your Ranks; the depth hath but eight men; double it once more, and it hath but four. See the Phalange consisting of four ranks, & every rank, hath four thousand, and ninety six men in it: But the length is four times as much as it was. In like manner doubling your files (which in *Ælian's* Phalange are a thousand, and twenty four) the first doubling to six hundred, and twelve files, and so many remaine; the second seven hundred, and sixty eight, and two hundred fifty five remaine; and so many men have you in a rank. But where the Phalange was but sixteen deep, now in the second doubling it is become sixty four deep: If you please to reduce it to the first forme, two doublings of ranks will suffice. Here we must understand that doubling ranks, is not to make twice so many as they were before, but to give twice so many men, so every rank, as they had before by inserting the even ranks into the oddes; as the second into the first, and the fourth into the third, and the sixth into the fifth, and the eighth into the seventh, &c. The use of doubling I will shew in my notes upon the twenty nine chapter of this booke. *Ælian* therefore would have his Phalange, of such a number as may be reparted continually into halfe, till you come to one, which number he saith to be sixteen thousand three hundred, and eighty four. And yet ariseth out of the Multiplication of one by two still doubling the product, till you have made up the full number, of sixteen thousand, three hundred, and eighty four. And as the Multiplication by two begets this number, so it being divided by two continually, it may be reduced at last to one: Which is the thing, that *Ælian* aymes at. For the numbers, shal have no equal division by halfe, leave some supernumerary men in the Phalange: (Which) in doubling will disorder both files, and Ranks: Every man acquainted with the Lowe country military exercise at this day, knoweth, that when there is an uneven number of files, the odd file supernumerary brings a difference, and cannot be doubled in the sort as the rest are: As in five, seven, nine, eleven, &c. several bodies of files: Two, six, eight, ten, may well be doubled, and become two, three, four, five files a piece: but the fifth, seventh, ninth, eleventh, must be severed from the rest of the doubled files; and serve to no purpose, being not matchable in depth with the rest after their doubling. The same reason is of ranks: Now when *Ælian* saith, that this number in a Phalange may be divided by halfe, and reduced at last to one, we must with all understand, that the file of the Phalange in such division, ought to be either of eight, or sixteen men a piece. For no number under eight, except four, or two (which site not the depth, of a Phalange) nor between eight, and sixteen, is divisible by halfe, till you come to one. Nor nor above sixteen except it be produced out of the duplications of sixteen, a file of 12, comes nearest. And of that number was the file of Cyrus in Xenophon. Such a file notwithstanding by division of two staies at three, and can defend no lower. Ten was the old file of the Grecians, and it was called Decas. And albeit after ward upon better consideration they enlarged the number of the file to twelve, yet they retained the name of Decas still. But ten receiveth but one division, and goeth downe ward no further then five. The uneven number under sixteen cannot be divided at all, Files by fraction. As thirteen, which if you will divide by halfe, the quotient will be six, and there remaineth an odd man over: of which number, if all the files of the Phalange should be, you should have a thousand, & two hundred, and sixty, which will receive no more, then 2 do doublings without a fraction. If then the files be above sixteen, and under thirty 2 you, cannot divide them continually by halfe, but you must site of the manner, that *Ælian* speaks of. As for the number of sixteen thousand, three hundred, and eighty four, albeit of itself it is divisible by 2 till you come, or asynd

a Xenophon.
lib. 1. c. 11. R.

to 1, yet we must not consider it apart, as an abstract by it selfe, but as it numbereth, and is applied to the Phalange. In which respect, it reacheth a 1024 files of 16 deep, which files will still hold out the doubling, till you come to one file.

3 A Phalange to consist of 16384. *Ælian* (out of the most Tactics writers as he professeth) will have the Phalange of sixteen thousand, three hundred, eighty and four men. I have noted before that a Phalange may be more, or lesse, than this number. With me, thus he saith: Antiochus whole army consisted of 70000 men. Of which the chiefest strength was the Phalange of Macedonians, containing 16000 men, ordered according to the forme, that Philip and Alexander had before used. He placed them in the middle, dividing the 16000, into 10 equal parts, in every of which parts was 50 men in front, and 32 in depth, and upon the flanks of every part 22: the shew of the Phalange was like a wall, of the Elephants like turricets: hitherto Appian. I have translated He Phalanx, He Macedonian according to the word, the Phalange of the Macedonians, where the right meaning is, the Macedonian Phalange. For it consisted not of Macedonians, but was armed, and ordered, after the Macedonian manner. For how was it possible for Antiochus to wage, and have in his service 16000 Macedonians, being never himselfe King of Macedonia, and the King, that then was (namely Philip the sonne of Demetrius) was his enemy, and in league with the Romans? Besides Appian hath in expresse words: the Phalange was armed, and ordered, according to the institution of Philip and Alexander: whose manner Antiochus might well receive, considering he was lineally descended from Seleucus, the successor of Alexander in the kingdom of Asia: And Seleucus had bene in the service of Alexander in the whole conquest of Persia. *Livy* saith also, they were armed after the Macedonian manner. Whereby a man may inferre, they were no Macedonians: Hence the same battaile (which was the battell of Antiochus against L. Scipio) hath thus: The Kings army was mingled of sundry nations, and divers with dissimilar Macedonians. They were called Phalangites. This was the middle of the battell, and in front divided into 10 parts, which parts were distinguished by placing 22 Elephants in each interval. The battell had 32 ranks in depth. It was the principal strength of the Kings forces, and both with the other shew, and also with the Elephants, which were eminent amongst the Armed only, brought with it great terror. *Livy* saith the 16000 were armed after the Macedonian manner, and were called Phalangites: Appian, that there were 16000 ordered, and distributed according to the ordinance of Philip and Alexander. *Livy*, and Appian, both agree, that there was 10 parts, and every part severed with intervalls, and had 32 men in depth, which is the Macedonian file once doubled. *Livy* speaketh not of the number of the length of the Phalange. Appian saith plainly there were 50 in front, of every of the 10 parts, which amounts to 500: for 10 times 50 makes 500. Now if you multiply the length of the Phalange which is 500 by the depth, which is 32, you have the 16000, whereof *Livy* and Appian speake. But yet remaineth a doubt, in the difference betwixt both those authors and *Ælian*. *Livy*, and Appian, both giving but 16000: *Ælian* 16384 a Roman (we may probably conjecture) was halfe a stranger, in the Art Tactics of the Grecians, and that, which he wrote, he had from others: perhaps no better skilled in the same Art than himselfe. Appian was a Grecian (for so those of Alexandria in Egypt accounted themselves) after Ptolemy the first had established that Crowne in his family, and as his historie sheweth, well acquainted with the order the Grecians held in embat-

b Liv. Decad.
lib. 2. c. 11. R.

ling their armies, and therefore we may the better rely upon his authority. Who about
the first affirmed the Phalange was of the number of 16000, yet after in numbering the
depth and length alone, he findeth 16000: and further expounding his own meaning
he sheweth, there were more upon the flanks of the ten parts, into which the Phalange
was divided. His words import: That Antiochus divided his Phalange into 10 equal
parts, giving every part in front 50 men, in depth 32, which being multiplica together,
make up the 16000. He addeth, And in the flanks of every part be set 22. If the
meaning be, he set 22 upon each flanks of every part, the parts being 10, and the flanks
20, the number will arise to 440, where Elian alloweth no more than 384. But if 22
were added to one of the flanks of each division, which also being collectively taken are
flanks in the plural number, we shall come short and finde no more than 220. Yet whether
sense of both you admit, it is plaine, that Appian attributeth more, than 16 thousand, to
that Macedonian Phalange. And it may be, there is an error in the number of the
22, and that it ought to be written 32. For if Antiochus had given 32, as he gave 22, to
one flanks of every part, and set 32 upon the uttermost flanks of every wing to strengthen
them, of the 12 times 32 had arisen the just number of Elians Phalange; which num-
ber is the fittest, for use, and for division of the Phalange in all doublings. The armed
foote then, according to Elian, ought to be, 16384. The light armed.

4. Halte so many] The armed among; if the Grecians, were accounted the strength
of the field, which was the cause their number was greatest. For you shall not find
in their battles for the most part, that the light armed amounted to halfe the number of
the armed: The fact of Cyrus sheweth what account be made of light armed: * Xeno-
phon reporteth it thus: He led with him the Lydians, those whom he saw to take
delight in Armes, horse, and chariots, and willingly doe, what they were com-
manded, he gaue armes to, of those whom he saw followed him against their wills,
he gaue the horses to the Persians, that were his first companions in Armes. All
that followed him vnarmed, he exercised to the sling, because he reckoned that
weapon most seruile of all others. How much you increase the number of the light
armed, so much you diminish the number of the armed, and by consequent so much wea-
ken your field. * For the light cannot maintain any stable fight, but in case of danger
they are forced either to shew a faire party of heels, or else retire to the armed for succor:
Teller they for many times ioyned with the armed. And the proportion that Elian setteth
downe, namely to haue halfe as many of them, as there are armed, standeth in good reason,
& cle. The Romans notwithstanding were more sparing in their light armed, & allowed
not above the 4th part of them, or fiftie more, to the armed. The Legion contained (saith
Polybius) 4200 footmen. Of these they chose 600 Triariars, 1200 h. foot, 1200
principes, (which come to 3000) and the rest Velites, which were 1200. And the
Velites were the same in effect among the Romans, that the light armed among the
Grecians, albeit their arming somewhat differed. Elian before sheweth, that the Gre-
cians light armed had no manner of defensive armour, but onely fine only, as bowes, darts,
or pikes. * Polybius describeth the Armes of the Velites to be a Sword, a Parma,

(which is a small Target), and darts; the sword a panish sword, the Target a little
round Target, a foote and a halfe (for so Casaubon correcteth Tripedon) in
breadth; the darts in the stea of foote long, and a finger thicke, and the head al-
most a foote long. And Livy mentioning the skirmishes, that fell out betwixt the
horsemen of King Philip of Macedonia, and Sulpicius the Roman Consul, compar-
eth both to v. armies together, telling that either party had their light armed ioyned to
their horse, and that coming to fight, the Romans had the better. So (with he) nei-
ther the Kings horse, vnaccustomed to a stedfast fight, were able to match the
Roman

Roman horse, nor yet the foote skipping and leaping here and there, and almost
halfe naked in their kinde of Armes, to be compared to the Roman Velites, hauing
a Target, and a sword, and being armed sufficiently both to defend himselfe, and
assail his enemy. The number even of Elians light armed, ought to be 8192, and
these being ranged behind the armed 8 degree (so they are fittest for service) will make
1024 files, as many as the armed did.

5. Halte as many horse, as &c.] The horse are in number 4096, and proportioned
to the foote (comprehending the light armed) as 1. to 6. The armed foote, and light ar-
med together make 24576: the horse 4096. And this was Alexanders proportion, a Diodor Sic.
when he moved first against Darius. For he had about 30000 foote, and 5000 horse, c. lib. 17. 11.
& not many more, as Diodorus saith. * Iustin giues him 32000 foote, 4500 horse. b Iustin. l. 1. 11.
Yet this number held not: imities amongst the Macedonians themselves; I meane Alex- c Diod. Sic. l.
anders Capitaines, that possessed his kingdoms after his death. The reason may be, that e 19.
saith betwixt Eumenes, and Craterus, (I speake of that battell before) Craterus had lib. 18. 644.
20000 foote, & 2000 horse; Eumenes had 20000 foote, & 5000 horse. f 619.
the proportion of 1. to 10; Eumenes of 1. to 4. * Antigonus fighting against Eu- d Diod. Sic. l.
menes in Cappadocia, had in his Army alone 10000 foote, and 2000 horse; Eume- e lib. 16. 649.
nes had as before. Antigonus horse were to the foote, as 1. to 5. * The same Antigo- e Diod. Sic. l.
nus fighting against Alceas, the brother of Perdicas, had in his Army 40000 foote, c 619.
and more than 7000 horse; the proportion well nigh of 1. to 6; Alceas had no more
than 16000 foote, and 900 horse, failing much of Elians number. * Antigonus in f Diod. Sic. l.
his second battell against Eumenes, had 28000 footmen, and 800 horse, which is 1. to lib. 19. 605.
3. and halfe; Eumenes had 35000 foote, and 6000 horse, very neare Elians pro-
portion. Many other examples are to be read in Diodorus. But (as I said) these are Ra-
maffes proceeding not of choice, but of necessity, which forced them to take such, as came
to hand; as it alwaies falleth out in suddaine leues. And it (seemeth the number of horse
used in it after he receiued his armie from Philip, who by premeditation, and fore-choise, g Diod. Sic. l.
had gathered it together with intent to invade Persia. And yet I finde h that Philip h Diod. Sic. l.
had gathered it together with intent to invade Persia. And yet I finde h that Philip h Diod. Sic. l.
than 30000 foote, and 2000 horse; which is 1. to 15: and in diuers other fights, what
was done, but was best to be done. And the number that Elian speaketh of, suites his
Phalange best. For Philips device being to caite the horse into wedges of 64 horse a
piece, and into 64 Troopes; the greatest ranke of each wedge being 15, with in the rear
equal the front of the armed, and of the light armed; not in number of files (for the
files of the foote were 1024, and the greatest ranke of the horse, no more than 960) but
in quantitie of place giuing to the horse, standing in their order of 6 foote betwixt man
& man, the 128 cubits of surplage toward the difference of the horses bodies, and to-
ward the small pikes that are to be left, betwixt Troope, and Troope. * The Romans, Polybius 6.
allowed a faire lesse rate of horse to the foote. In a Legion, according to Polybius his 472. C.
account, there were of Citizens 4200 foote, and 1300 horse; of allies, and confederates
4200 foote, and 600 horse. In a Consular Army were 2 Legions of Citizens, and 2 of
Allies, which came to 16800, a number not much differing from Elians Phalange of
foote. Of horse 600, allies 1200; in all making 1800; which is cometh much short of
4096, (the number Elian alloweth to his Phalange) and holdeth proportion of about 1.
to 5. The reason of this difference, may appeare in the fact of * Eumenes; who not
much trusting his forces of foote against the Macedonians (accounted the best souldiers
of

The Tactics

of this age.) prepared himselfe a sufficient number of horse with them to make a counter-balance against the Macedonian foot. And it hath bene the manner of Generalls of ancient time, if they trusted their foot-forces, to make the lesse account of horse: if they distrusted them, to encrease the number of their horse.

The Romans trusting to their foot, required the lesser number of horse. The Grecians had the greater number of horse, both for the cause before recited, and further because they had continuall warre with Barbarians, that placed their confidence in horse; as the Persians, and the inhabitants of the lesser Asia.

The names of the severall parts, and of the Commanders of the severall parts of the Phalange, and of the numbers under their commands.

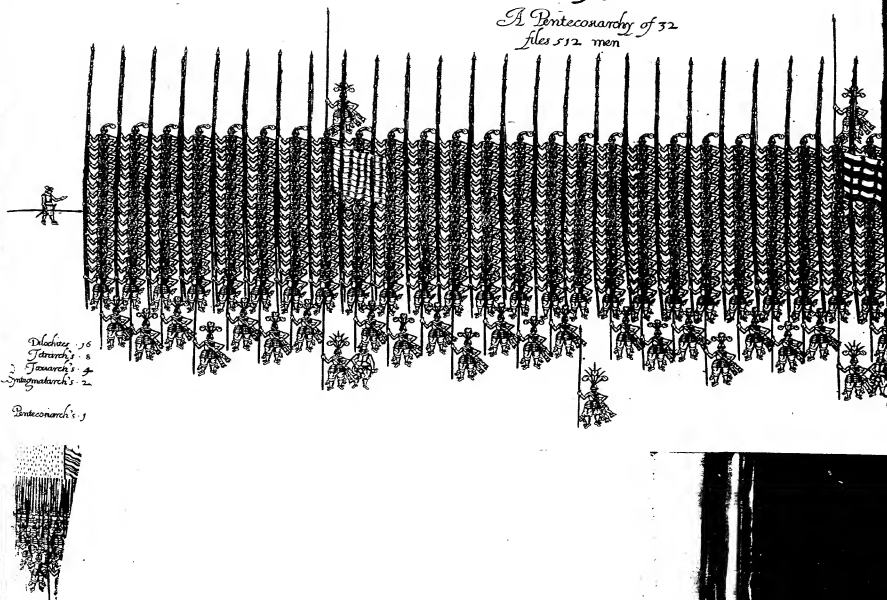
CHAP. IX.

THE files are ordered into bodies, which have every one a proper name. For two files they call ¹ a *Dilochie* of thirtie two men, whose *Leader* is termed *Lilochista*. Four files ² a *Tetrarchie*, and the *Leader* thereof *Tetrarches* having charge over 64. men. Two *Tetrarchies* ³ a *Taxis* of 128. men, and 8. files, and the *Leader* thereof hath the name of *Taxiarches*. Two *Taxis* goe to ⁴ a *Syntagma* of 16. files, and 256. men; and the *Leader* thereof is called *Syntagmarches*. A *Syntagma* of 256. men is called of some a *Xenagis*, and the *Commander* *Xenagos*. In every *Syntagma* of 256. are five ⁵ superordinary men, viz: ⁶ An *Ensigne*, ⁷ a *Reare commander*, ⁸ a *Trompeter*, ⁹ a *Sergeant*, and ¹⁰ a *Crier*. This *Syntagma* seemeth to have ¹¹ a *Tetragonal* forme of 16. men in length, and 16. in depth. Two *Syntagmas* make ¹² a *Pentecostarchie* of 512. men, and 32. files, the *Leader* whereof is named *Pentecostarches*. Two *Pentecostarchies* make ¹³ a *Chiliarchie* of 1024. men, and 64. files; and the *Leader* is called *Chiliarches*. Two *Chiliarchies* are called ¹⁴ a *Merarchie* of 2048. men, and 128. files, whose *Leader* is named *Merarches*. Of some this part is called a *Telo*, and the *Leader* thereof *Telarches*. Two *Telarchies* make ¹⁵ a *Phalangarchie* of 4096. men, and 256. files, the *Commander* whereof is called *Phalangarches*. Yet some call it a *Strategie*, and the *Commander* *Strategos*. Two *Phalangarchies* ¹⁶ a *Diphalangarchie* of 8192. men, and 512. files. There are that terme this part ¹⁷ *Meras* and it is one of the wings. Two *Diphalangarchies* make a fourth *Phalange* consisting of 16384. files, and 16384. men. So have you in the whole *Phalange* of armed foot two wings, foure *Phalangarchies*, eight *Merarchies*, sixteen *Chiliarchies*, thirty two *Pentecostarchies*, sixtie foure *Syntagmarchies*, one hundred twentie eight *Taxiarchies*, two hundred fiftie six *Tetrarchies*, five hundred twelue *Dilochies*, one thousand twentie foure files.

Notes.

HEther to have bene shewed, the manner of arming, and lewying of *Souldiers*, filing, and the parts of files, ioyning of files, and ranking, the local forme, and parts of a *Phalange*, the number of the armed, light-armed, and horse-men requisite to a *Phalange*. This Chapter contains, as it were, the matter, of which a *Phalange* is compounded; that is the severall bodies *Militarie*, ordered, and ioynd together, to make up the perfect forme of it. These bodies are many, and arise out of ioyning files by doubling

Cap. 9.

A Pentecostarchie of 32
files 512. men

The Tactics

himself a sufficient number of horse with them to make a counter-Macedonian foot. And it hath bene the manner of Generalls of trusted their Foote-forces, to make the lesse account of horse: if they increase the number of their horse. The Grecians, trusting to their Foote, required the lesser number of horse. The Roman number of horse, both for the cause before recited, and further because they warre with Barbarians, that placed their confidence in horse, the inhabitants of the lesser Asia.

the severall parts, and of the Commanders of the severall parts of Phalanx, and of the numbers under their commands.

CHAR. IX.

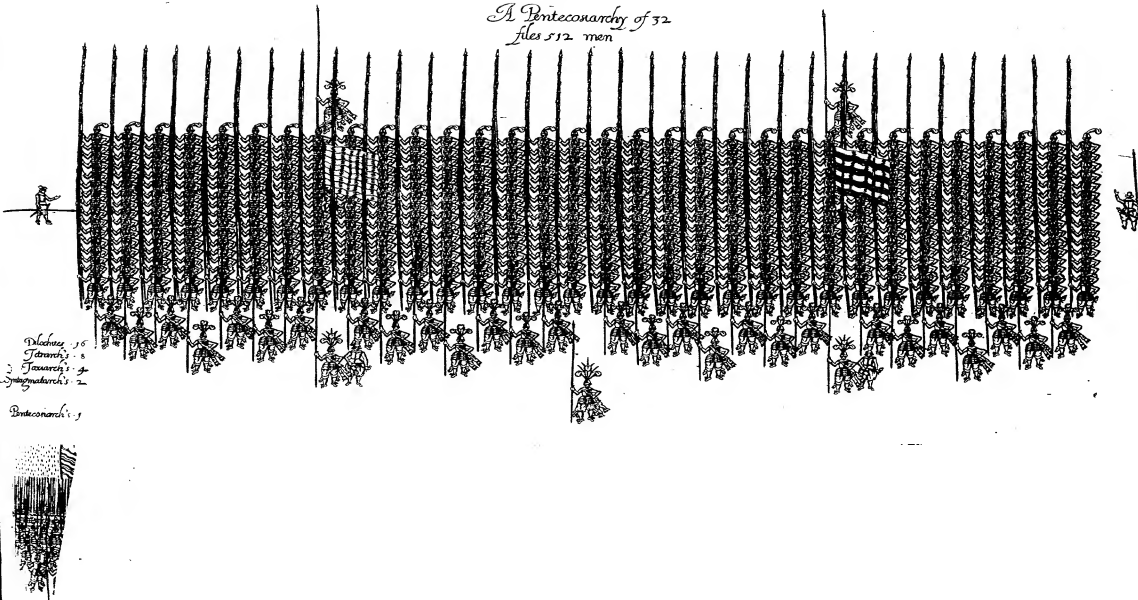
ordered into bodies, which have every one a proper name. For they call 1 a *Dilochie* of thirty-two men, whose Leader is termed *Liloches* 2 a *Tetrarchie*, and the Leader thereof *Tetrarches* having charge Two *Tetrarchies* 3 a *Taxis* of 128. men, and 8. files, and the Leader thereof is called *Taxiarcha*. Two *Taxes* goe to 4. a *Synagmu* of 6. men, and the Leader thereof is called *Synagmatarcha*. A *Synagmu* of some 4 *Xenagys*, and the Commander *Xenagos*. In every are five 1 *superordinary* men, viz. 6 *An Ensignes*, 7 *a Reare* *comptroller*, 8 *a Sergeant*, and 9 *a Crier*. This *Synagmu* seemeth to have some of 16. men in length, and 16. in depth. Two *Synagmas* make 1 *Phalangie* of 512. men, and 32. files, the Leader whereof is named *Phalangarches*. Two *Phalangies* make 1 *Chilarchie* of 1024. men, and 64. files, the Leader is called *Chilarches*. Two *Chilarchies* are called 1 *a Mesarchie* of 128. files, whose Leader is named *Mesararches*. Of some this part and the Leader thereof *Tetrarches*. Two *Tetrarches* make 1 *a Phalangie* of 512. men, and 32. files, the Commander whereof is called *Phalangarches*. Two *Phalangies* make 1 *a Strategie*, and the Commander *Strategos*. Two *Phalangies* make 1 *a Phalangie* of 512. men, and 32. files. There are that term them *Phalangies* and it is one of the wings. Two *Diphalangies* make a *four-phalangie* of 1024. files, and 16384. men. So have you in the Phalanx of armed foot two wings, four *Phalangies*, eight *Mesararchies*, thirty-two *Pentecostarchies*, six *Taxiarches*, one hundred and twenty *Tetrarches*, two hundred and fifty *Synagmatarches*, five hundred and twenty *Phalangarches*, and twenty four files.

Notes.

we have shewed the manner of arming, and leyning of Soldiers, filing, of files, ioyning of files, and ranking, the local forme, and range, the number of the armed, light-armed, and horse-men required. This Chapter contains, as it were, the matter, of which a *Phalanx* is made up, it is the severall bodies Militarie, ordered, and ioyned together, to make up of it. These bodies are many, and arise out of ioyning files by doubling still

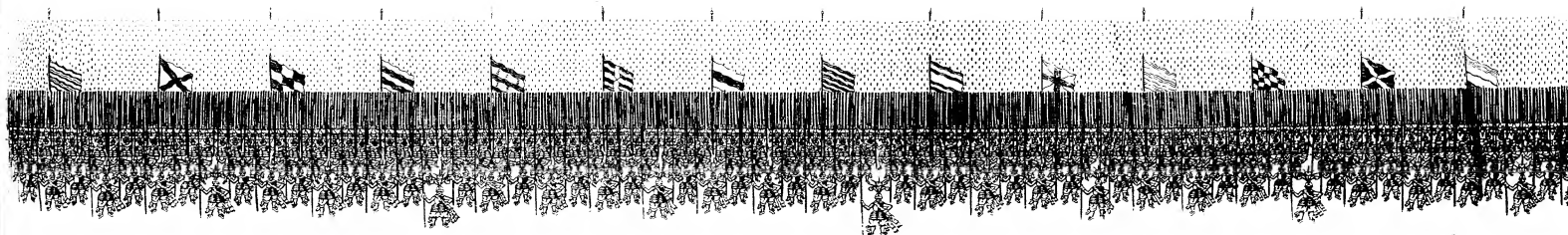
Cap. 9.

A Pentecostarchy of 32
files 512. men

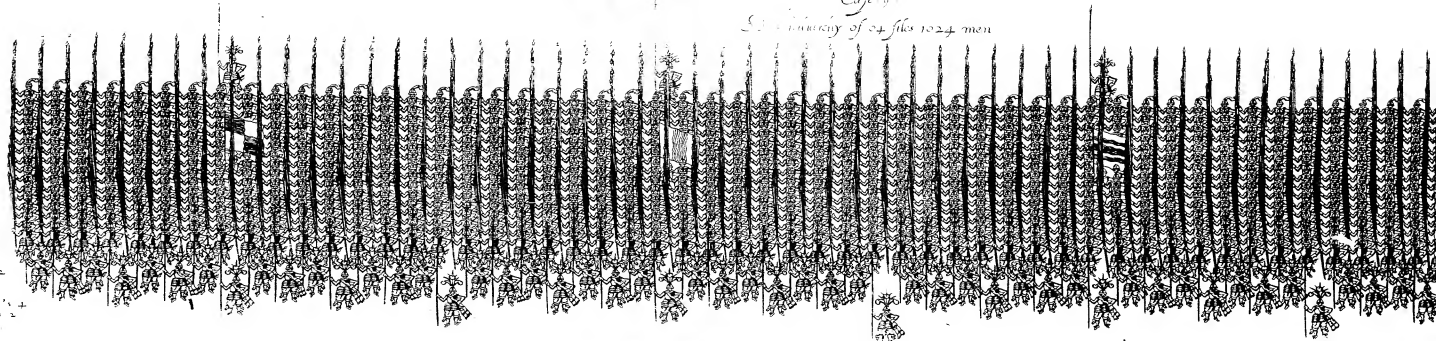


Cap. 9.

A. Phalanx of 256 files 4096 men



Cap. 9.
of a Tetrarchy of 24 files 1024 men



Tetrarchus 1. 10.
 Tetrarchus 1. 10.
 Tetrarchus 1. 10.
 Tetrarchus 1. 10.
 Tetrarchus 1. 10.

Once the difference is, that a Tetrarch being a King, or a Governor, is the government of
 both the government of the fourth part of the land, (for a Tetrarchy is the government of
 the fourth part) but a Tetrarchy in Italian signifies a body military consisting of four
 parts (4 files) and the Tetrarch commands not over one alone, but over all the 4 parts.
 3 A Taxis] As the word Tetrarchy is diversly taken, so is Taxis likewise. For
 sometimes it imports Order in a generall signification, as I noted before: Sometimes the
 order

h. Sylochy of
2 files 32 men



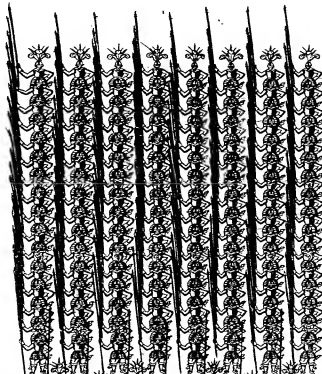
Adouc or h. Sylochy
of 2 files

h. Tetrarchy of
4 files 64 men



h. Tetrarchy or Commander
of 4 files

h. Taxus of
8 files 128 men

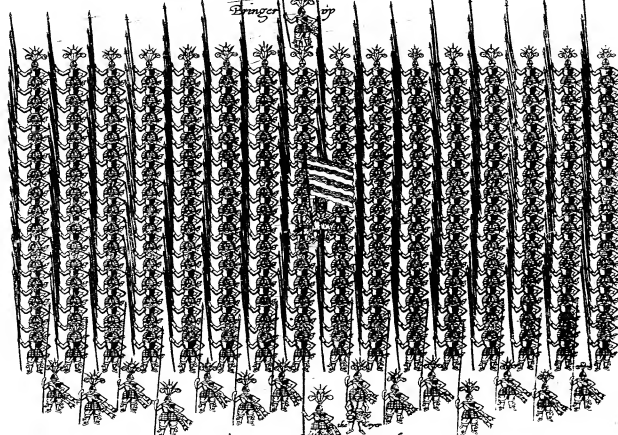


h. Taxus or Commander
of 8 files

Cap. 9.
The Rear

h. Syntagma of
16 files 256 men

The Rear com
Bringer



h. Syntagma or Commander
of 16 files



h. Sorcari

by knowne for Kings. Thessaly likewise was divided into 4. Principalities, Thessaliotis, Pthiotis, Pelasgiotis, and Astiotis; whereof everyone was named a Tetrarchy. Only the difference is, that a Tetrarch being a King, or a Gouverneur, signifies him, that hath the government of the fourth part of the land, (for a Tetrarchy is the government of the fourth part) But a Tetrarchy in Italian signifies a body military consisting of four parts (4. files) and the Tetrarch commands not over one alone, but over all the 4. parts. 3. A Taxis.] As the word Tetrarchy is diversly taken, so is Taxis likewise. For sometimes it imports Order in a general signification, as I noted before: Sometimes the

still their number, and haue every one a severall Commander. The least is two files ioyned together, which is called a Dilochy; And because there are in Phalange 1024. files, there must also bee 512. Dilochies, which consist of two files a peece. If you double this body of two files, and make thereof a body of foure files, it hath an other name, and is called a Tetrarchy, of which Tetrarchies there are 256. in a Phalange. Double againe these 4. files, and make 8. the body is called Taxis. And these eight files, being doubled bring out the Syntagma of 16. files which is a square number of men, 16. in the front, and 16. in the flanke. And so proceeding still in 6. doublings more, you come at last to the fourefold Phalange containing the number of 16384. men, and 1024. files. Now as in the Phalange there are 16. bodies out of these doublings, the Dilochy being the first, and the fourefold Phalange the last: So doth *Ælian*, appoint for every body a Commander, who albeit they severally command, each his owne troupe, yet are they subordinately one under another, the lesser under the greater, till at last the sovereignty of the command rest in the General of the Army. ^a The Dilochies are directed by the Tetrarches, the Tetrarches by the Taxiarches, the Taxiarches by the Syntagmatarches, the Syntagmatarches by the Pentecostarches, and they by the Chiliarches, over whom are Merarches, and over the Merarches the Phalangarches, and over them the Commanders of the wings, or Diphalangarches, and the sovereignty of the Armie or General is the highest, and last. The number of these Commanders a man would think were to no great purpose being in all (the 2. Diphalangarchies therein comprized) 1022. besides the file Leaders, which standing in the heades of their files, amount but to two men more; that is to 1024. For so many (as I have said) are the files of the Phalange. But if the conveniency be observed, it will not seeme impertinent. ^b For all the Leaders being in front, (therefore are they called Leaders, because they precede, and the rest follow,) it makes both a gallant shew, and that rancke being as it were, the edge of our battaile, not only serves to keep a sunder, and rent a peece the forces of our enemy; But also standeth as an assured bulwarke of defence before the rest of the Armie, that followeth. And it is well used by ^c Leo, that the multitude of Commanders (in orderly divisions) both signifies, that there are many worthy and valliant men in the armie: And is a meanes to keep the Souldiers in greater obedience, and to give vndoubted effect to all directions. Of what qualitie and disposition, those Leaders ought to be, you may see in the fourth Chapter of *Leos* Tactics. Only I will add, that as they are higher in dignity, so ought they in vertue and valour exceede those, that are under their command. ^d Leo cap. 4.

¹ A Dilochy] Consists of two files; for so signifies the word Dilochia: and the Lea-Dilochia, or is called a Dilochite.

² A Tetrarchy] Offoure files; and the Leader is called a Tetrach, one that hath the command of foure files. And here I must once more admonish, that in the words of diuers signification, we must not weigh, what is the proper signification, but how they are used in this Art, and booke.

For the word Tetrach signifieth sometimes a King: as *Hefychius* hath: and ^a *Deiotarus* in *Tully* is called a Tetrarch, and ^b *Herode* in the *Gospell*, who both are commonly knowne for Kings. Thessaly likewise was divided into 4. Principalities, Theffalotis, Pthiotis, Pelagiotis, and Astiotis; whereof euery one was named a Tetrarchy. Only the difference is, that a Tetrarch being a King, or a Gouvernour, signifies him, that hath the government of the fourth part of the land. (for a Tetrarchy is the government of the fourth part) But a Tetrarchy in *Ælian* signifies a body military consisting of foure parts (4. files) and the Tetrarch commands not ouer one alone, but ouer all the 4. parts.

³ A Taxis] As the word Tetrarchy is diuersly taken, so is Taxis likewise. For sometimes it imports Order in a generall signification, as I noted before: Sometimes the

^a Xenoph. Cyrop. lib. 8. cap. 3. A.

^b Xenoph. Cyrop. lib. 3. cap. 8.

^c Leo cap. 4.

^d Cicero in orat. pro Deiotaro. e Luc.

¹ order of a battaile: ² sometimes a company of any kinde of Souldiers, foote, or horse. as Taxis Pelastarum, Taxis Equitum; Sometimes a single Phalange, as in ³ Arrian mention is made of Taxis Oeni, Taxis Perdicce, and Taxis Meleagri &c. who were Phalangarches, as the story sheweth. ⁴ Sometimes for all the armed, as Taxis Phalangitarum: Sometimes a ranke of men standing embattailed, as in Thucydides, who describing the battell of the Lacedemonians, (saith the front) which he calleth the first ranke: ten proteen Taxis) consisted of 448. But in a more speciall signification it is taken for a band of Souldiers. And in that signification the number varieth. ⁵ In Xenophon, it comprehendeth a hundred men: What the number of the Athenian Taxis was, I finde not delivered by any Writer. That they had Taxisarches ⁶ Polyenus sheweth plainly. And if a man with lease might see, I would imagine their Taxis consisted of 250 men: For I finde in the same place of Polyenus, that they had Chiliarchies, Pentecoliarchies, Taxies, and Lochagies. I have before shewed, that Lochos in Xenophon is made sometimes of about 100. men. Out of which may be inferred with probability, that Taxis, being the next degree above the Lochagie, hath the double number, or more: The rather because a Chiliarchie having in it a 1000. the Pentecoliarchie must have 500. and by likelihood the Taxis 250. as being the next office under the Pentecoliarchie. But whosoever the Taxis of the Athenians, or of other people was, ⁷ Arrian maketh his Taxis up with 128 men, and 8 files; which is a double number to the Tetrarchie. With whom Suidas agreeth, giving 2. Tetrarchies to a Taxis: and saith it consists of 128 men. The Commander of the Taxis is called a Taxisarch, as the Commander of the Tetrarchie is a Tetrarch. Here I am to note by the way, that the Interpreter of Xenophon translateth Taxisarcha, the Commander of a Cohort; where Taxis in the straighter signification cannot be taken for a Cohort because a Cohort differeth much in number, having in it at the least 500. and odd men, where the Taxis, when it is greatest hath no more then 128. And ⁸ Polybius saith plainly, that Spira is the Greeke word, that fully expresseth the Romane Cohort.

4. A Syntagma] The word cometh of Synactio, or Syntatto, to place together; and a Syntagma is a body compounded of many parts: artificially put together. But it may be taken for any body in the armie. ⁹ Diodorus reports of Dionysius the elder that after he had diuided his whole Armie, (which had in it 30000) into three parts, he employed two against the Carthaginian Campe in diuers manner: himselfe tooke the Syntagma, or third part, which consisted of mercenary Souldiers, and led against that quarter of the campe, which had the Engines. ¹⁰ Arrian also writeth the word diuerslie; For he calles the whole armie by the name of Syntagmata, in the plural number, and sometimes Syntagma in the singular. And further giues the same name to a file, ¹¹ Suidas likewise describing the length of a Phalange, saith, it is the first ranke (Syntagma) of file Leaders, which stretcheth forth in a right line from wing to wing. Whereby appeareth that which the Logitians affirme, (which I touched before) that there are more things then names of things: And that fit names cannot be given to all. The names that have beene given by antiquity, to expresse the severall bodies of the Phalange, are to be retained by us, as proper enough to signifie the thing they meant. Neither are we to vary from them, unless we our selves can inuent better. The Syntagma that Arrian here mentioneth, is framed of two Taxies, that is of 16. files, & of 256 men. The Commander of it is named a Syntagmararch. And where he addeth, it is called of some a Xenagys, we are to understand that ¹² Xenagos was he (amongst the Grecians) that had the command of a band of strangers, (as he that leuied strangers was called a Xenologos) and the band it selfe was called a Xenagys. Why the Syntagma should have the appellation of Xenagys, I cannot divine, unless the reason were, because it was about the

¹ Polyb. lib. 11. c. 41. G.
² m Polyb. lib. 11. c. 41. G.
³ Arrian. lib. 1. c. 13. 397.
⁴ * Cp. 37.
⁵ o Suidas in meteo.

number, whereof strangers made their companies, that served amongst the Grecians. And I thinke, and shall till better information, that the body of the light armed called a Xenagys mentioned hereafter, had that name likewise for the same reason. Now of all the bodies in this Chapter mentioned, there is none that cometh so neere the companies as at this day, as doth the Syntagma, for (excepting that our numbers differre, and are in diuers places more, or lesse) the offices of each are alike. You haue in the Syntagma a Lieutenant, or Reare Commander, so in our Companies. In the Syntagma, is an Ensigne, and an Ensigne-bearer: the like in our Companies. In a Syntagma is one Sergeant, our part haue two drummes. We onely want a Crier, which euery Syntagma amongst the Macedonians had. What the use and place of all the officers was, I will straight discover.

5. Fines superordinarie men;] Namely the Ensigne the Reare-commander, the Trumpetter, the Sergeant, and the Crier of whom we last spake. That which I translated, superordinari, is in Greeke Ectactoi. ¹ Suidas giues the reason, why they were so called: because (saith he, they were not numbered as part of the battaile, that is ordered in files & rances. ² As Xenophon saith of Mirarches, Chiliarches, and Taxisarches, & other Commanders (whom Cyrus called to him) that they were not reckoned amongst the militarie numbers, and might depart from the Phalange without altering the forme thereof. In the files they could not be, because they should so increase the number in the files, and make one longer then an other, and hinder doublings, and other motions, besides the deformity, they should bring in, in making the battaile uneven: And a file of themselves they could not make. The like disorder would they bring in the rances, where they could not conveniently stand, unless some body filed with them, being much shorter of file of themselves. Besides their employment is so stirre here and there apart, as they are commanded: where they of files, and rances neuer move single, but jointly, as shall seem good to their Commander. And albeit these files be removed from the battaile, yet remaineth the battaile without them entire of it selfe, and in perfect forme, as though there were no need of them, when notwithstanding their use is otherwise so needfull that although the battaile may be, it cannot well be without them.

An Ensigne] Our use is to call the Ensigne-bearer an Ensigne for breuitie sake; As a Drummer, a Trumpeter, a Trumpet, and that not absurdly. A distinction will easily appeare in common speech, by the application of words, of circumstance to the one, or the other. The end why ensignes were diuised appeareth in: ³ Diodorus Siculus, he giuing diuers reasons, why the Egyptians (whom he accounted the ancientest of men) were carried away with superstition of worshipping Beasts, after the manner of the Country, hath amongst other words these in effect: A second cause the Egyptians giue, because of old time being in diuers conflicts thorough disorder in their Armie, vanquished by their borderers, they had recourse to the inuention & bearing of Ensignes in their troupes. They say therefore, that preparing images of the beasts, they now worshipp, and fastening them to the ends of long staves, the Commanders caused them to be borne aloft by meanes whereof euery man knew of what troupe he was. And seeing this good order auailed much to victorie, they conceiued, that the beasts were the cause of their safety. In recompence whereof they ordered, that none of these beasts should be killed, but be honoured with religious care and worship. Ensignes were then deuised for readines to direct souldiers in particular, whither to resort in time of fight. ⁴ Caesar practise agreeth hereto: as he telling of his owne souldiers disorder hath thus: VVhatouer part they came into by chance, and to what Ensigne soeuer, there they staid, least in seeking their

¹ Diodor. Sic. lib. 1. 34.

² Caesar. de bell. gall. lib. 2.

owne they might happily lose the time of fight. And Vegetius enlargeth the cause *arguing thus*: The ancient warriors perceiving that in time of fight the order, and abating of an Armie was quickly brought in route, and confusion, to avoid this inconvenience, divided the Cohorts into Companies, and appointed an Ensigne of every Company. So that in the Ensigne was written, of what Cohort and of what number in the Cohort the Companie was. Which the souldier seeing, or reading could not erray from their Companions, though the tumulte were never so great. *Leo also maketh this use of the Ensigne*: Vce command also, *saith he*, that the heads of the Ensignes of every Company or Band be of one colour, and that the like of every Turme, or Drunge, have a colour by it selfe. And to the end that every Companie may with ease know their owne Ensigne, other markes and tokens are to be added to the heads of the Ensignes, that according to Turmes, and Drunges, and Companies, they may be knowne. But in any case, let the Ensignes of every Turmarchy be different one from another, & cleare to be discerned, that the souldiers may know them even at a farre distance. *His meaning*, as I take it, is, that every great body, or regiment should beare their Ensignes a severall colour, and that the Companies of that body should likewise hold themselves to the same colour in their Ensignes: So notwithstanding that (as the use is at this day) the Ensignes of every Company should have a severall marke to be knowne by, besides the colour in generall. For so both the Regiment may be quickly discerned, and one Company with facilitate be distinguished from another. What the forme of the Ensigne was, we may out of the former place of Diodorus see: The Egyptians, *saith he*, counterfeiting the shape of those Beasts, which they worshipped, fastened the Portraict to the end of long staves. *Xenophon testifies the like of the Standard of Cyrus*. Cyrus (*saith he*) commanded his army to cast their eyes vpon the Standard, and to follow it with equall pace, and in order. The Standard was a golden Eagle stretch out vpon the end of a long staffe. Which Standard is at this day the Standard of the Kings of Persia. The Ensigne was nothing else, but the figure of some beast advanced high vpon the end of a long staffe. As of an Eagle, of a Wolfe, of a Horke, and such like; and sometimes they added peeces of coloured silke fastned vnder these images to make a greater difference betwixt the Ensignes. Whether our Ensignes at this day, made of many sorts of Taffety, or the ancient Ensignes of the Græcians (I may also adde of the Romans, for they observed the same forme) are the better for use, I will not dispute. I may notwithstanding freely say, that the stronger reason we have for the Ancient. For besides the authority of such excellent wits, as they were, and so exquisite in their invention, the reason of the lightnes is to be preferred: Besides the winde hath no such force over them, and they neither hinder the Souldiers, that stand next by canting, nor by flapping in their faces, nor take away the sight of such things as are to be observed and regarded in the field. For the matter whereof the Ensigne was made, see Iustus Lipsius in his Commentaries to Polybius. As for the armour of the Ensigne-bearer (especially the Ensigne-bearer of the armed) I take it (for I have no authority therein) that he had the same defensive Armour, that the Souldier which fought vnder the Ensigne had (excepting the Target) both to assure himselfe from the flying weapons of the light armed, and from the pike and sword of the armed, in case the battailie were entred and pierced as farre, as the Ensigne. For it was no reason, he should carry a Target, left both his hands should be bound, the right with the Ensigne, the left with the Target; and so he have no use of either against the enemy. And in the left hand I would give him a pike, or iavelin, (not a pike, which cannot be wielded with one hand) for his owne defence, and to offend the enemy. Which weapon, I have read Es- signs

y Xenoph. Cy-
rep. lib. 7.
172. D.

y Iustus Lipsius
in Polyb. lib. 4.
D. cap. 1.

signes of ancient time did beare. What the Ensignes place was, whether in front, or in the middle of the Battailie, I see it controverted. *Parricius absolutely affirmeth, that the Ensignes were placed in the middle of the front, and bid 8 files on the right, and 8 on the left, to the end they might be scene, and followed by all. That Ensignes were first invented to be a marke of severall bodies military in an Army, I have before shewed. But it followeth not thereof, that they were placed in the front in time of fight. For being in the middle, they no lesse gave notice, what the body was, than in the front. The reason of following it of lesse force; inasmuch as the Souldier well knoweth whom to follow, when to advance forward, when to turne his face to the right, or left hand, when to countermarch, when to double, and when to use all other motions military. And the Commanders were therefore called Leaders, because they went on before, and the Souldiers followed after. So that the Ensigne, in regard of following, neede not to be seen in the front. 8 Tet in exercising the trouper, and in marches, I finde, that the Ensigne was in the front, together with the Capitaine, Crier, Trumpeter, and Guide. But the reason to be, because being in the middle, and having neither file, nor ranke with the rest, they might happily bring a confusion, and be a hinderance to the changes, and di- vers figures of the Battailie. When the time of fight was, the Ensigne retired to his place, that it to be in the middle. For so *Leo* interpreteth himselfe in his precept of closing files, which must be done, *saith he*, not only by File-leaders in front, Commanders of file, and Bringers-up in the Reare, but in the middle also, where the Ensigne standeth. And I rather agree to *Leo* herein, because I see, it was the manner of the Romans also, to place their Ensignes in the middle of their Maniples. From whence came the appellation of Antesignani, Souldiers that stood before the Ensignes, and Postsignani, that stood behinde. Besides the Ensigne being in the front, the Ensigne-bearer may loose his a clap, who falling the Ensigne goeth to ground, and is in danger of loosing; which was the greatest disgrace among the Romans, that might befall. Lastly, *Elian himselfe in plaine words placeth the Cornet of horse farre from the front. For speaking of the ordinarie Horse-troupe, he saith it is to consist of 64 horse, the first ranke of 15 horse, the 2 of 13, the 3 of 11, the 4 of 9, descending still, and diminishing 2 horse in every ranke, till you come to one. He addeth, he shall carry the Cornet, that standeth in the second ranke next the ranke-Commander on the left hand; which ranke is the second ranke, himselfe declareth, making the ranke of 15 the first, the 2 the 13; which is the 7th from the front, and next the reare but one. If the Cornet have no place in seeing, and following are equal to both? And albeit I Suidas place the Ensigne, the Crier, the Tromper, and Sergeant, before the Battailie, the Lieutenant in the reare, he is notwithstanding to be understood, of the times of marching, or of exercise, which I noted before. For what (should that Rable of armed (being 4, in every Syntagma, and chief of the Armie: who therefore have the front, that they may make speedier way into the enemies battell?**

7 A Reare-commander] Was the same that a Lieutenant is with vs. He commanded the Souldiers in the Reare, no lesse then the Syntagmararch in the front, and had his place in the Reare. What the duty of a Reare-commander was, I have shewed plainly. He was armed, as the rest of the armed of the Syntagma, namely with Pike, and Cyrop. lib. 6. Target, and with such other armes, as I have described in my notes vpon the second Chapter.

a Suidas in
Ecliticos.

8 A Trumpet.] *The invention of the Trumpet is attributed to Titthenus Hercules sonne. But the different use of these officers is worth the noting out of.* Suidas: The Crier, *saith he*, ferueth to deliuer directions by voice, the Ensigne by signall, when noite taketh away the hearing of the voice: the Trumpet by sound, when thorough thickness of dust a signall cannot be discerned: The Sergeant to bring such things, and dispatch such messages, as his *Synagmarch* commands. So that these officers were held all necessary for a Company, the one supplying the defect of the other, and serving for use when the other failed. The Trumpet then was to be used according to Suidas, when neither the Crier, nor Ensigne could doe service. With the Trumpet was the signall given for the Campe to remove, for the Campe to lodge. By the Trumpet the Souldiers were taught their time to fight, their time to retreat. The Trumpet set and discharged the watch. From the Trumpet came the measure of the Marche, and the quickness, and slowness of Pace. In briefe, the Trumpet did all the offices, that the Dromme doth with us at this day. Whether the Trumpet or Dromme, are of most use in the field, I may not now dispute. Onely I will say that the Græcians and Romans the most expert and iudicious Souldiers, that euer were, held themselves to the Trumpet, and neuer used the Dromme. The Dromme was first invented by Bacchus, who, as Polyenus reporteth, fighting against the Indians, in stead of Trumpets, gave the signall of Battaille with Cymballs and Drommes. From him it came to the Indians, who used it altogether, as Curtius noteth in the battell betwixt King Alexander the Great, and Porus. The Dromme of Parthians is described by Plutarch in the life of Crassus; and by Appian. And Leo saith, the Saracens, who invaded Christendome, and infected the Turkes with their superstition, ordered their fights by the Dromme. From this Eastern Asiaticall people it was brought into Europe; and now the generall custome is amongst all European Nations, that the foote have Drommes in the field, the horse Trumpets. And yet for the Trumpet, I cannot say, that all the Græcians held themselves precisely unto it. Plutarch much commendeth the Lacedæmonian manner of toying with the enemy, and writeth it in this sort: When the King hath offered the Goale (that was the Lacedæmonian sacrifice, when they were to giue battaile) hee straight commands all the Army to crowne their heads, and the Flutes to sound the measure of *Passor*: And himselfe withall beginneth the *Passor*; (the song they used when they were to charge) and advanceth first against the enemy. So that it is a braue, and no lesse fearefull thing to behold them pacing according to the measure of the Flute; neither dissolving their order, nor shewing any astonishment of minde, but mildly, and ioyfully approaching the danger of conflict, diuiding out their Marche to the found of the instrument. For it is not likely, that men so demeaning themselves, can be transported with feare, or choler. Nay rather they must needs haue a seiled minde full of hope, and assurance, as if God were present on their side: thus Plutarch. Out of whose words it is cleare, that the Lacedæmonians used no Trumpets in fight, but Flutes, and made them their instruments to dance, as it were, the measures of warre by. For they used an *esse*, and slow pace, framed to the cadence of the found; which may well be resembled to the solemn measure, in dancing. Athenæus rehearseth out of Herodotus, that the Lydians used the like. But he addeth, that the Cretans made choice of the Harpe for their instrument of warre; as though it had beene peculiar to that nation. Paulinus testifieth the like of the Lacedæmonians. Polybius saith not so farre, but affirmeth onely that the Cretans, and Lacedæmonians in stead of Trumpets brought in Flutes, and measures into the warre. And if it were so that the Lacedæmonians used Harpes, it is like, they took them from the Cretans. For I finde

b Polyen. lib. 1.
in Bæcho §. 1.
c Corneli. lib. 9.
37.
d Plutarch. in
Cræso
e App. in Par-
thens 143.
f Leo cap. 18.
§. 111.
g Plutarch in
Lytago.

h For this mea-
sure see full
Polyen. lib. 4.
cap. 10 §. 2.
i Plutarch in
Lytago.
k Athenæus
de panopliis
lib. 13.
l Plutarch in
Cræso 193.
m Polyb. lib. 4.
cap. 18.

k Thucyd. lib.
2. cap. 4.
l Polyen. lib. 1.
in Prole §. 1.
m Athenæus
de panopliis
lib. 13.
n Plutarch in
Cræso 193.
o Polyb. lib. 4.
cap. 18.

in Plutarch, that Lycurgus brought many of his Lawes from Crete, and had great familiarity with Thales the Cretan, whom he also sent to Lacedæmon, to make an enquire for the establishing of his lawes, that were then newly finished. Yet Diodorus Siculus reporteth, that the Lacedæmonians used also Trumpets in their Battails. He writeth of a fight that was betwixt the Thebans, and Lacedæmonians, under the leading of Agellus; where these words in effect: There was a strong fight when the Thebans issued out of the City at all hands, Agellus seeing the multitude, when the Trumpet to found a retreat. The signe of retreat here, was given by Trumpet, and not by Flute, as the Lacedæmonians had the use both of Trumpet, and Flute, in pacing toward the enemy to ioyne battaile; of the Trumpet in all other military signalls, such (I haue before noted it) as the rest of the Græcians gave by Trumpet. The place of the Trumpet in the time of the Battaille was within the Phalange by the Ensigne. Thucydides placeth the Flutes of the Lacedæmonians within the battaile, where they can finde no room, vnlesse they stand by the Ensignes. And albeir Polienus saith, the Flute led the Army, and went before, yet that it is to be vnderstood in the marche. For in case of a Marche, or exercise, Leo also giueth the Trumpet place by the Capitaine in front. When the fight commeth, he retireth himselfe to his place in the Battaille with the rest.

p Polyen. lib. 1.
in Prole §. 1.
q Plutarch in
Lytago.
r Thucyd. lib.
2. cap. 4.
s Polyen. lib. 1.
in Prole §. 1.
t Leo cap. 18.
§. 111.

9 A Sergeant.] The word Hyperetes significeth a Minister, (which is all one wherein the Sergeants, next degree to Iustices, are called seruientes ad legem. I re- tyme therefore the name of Sergeant, because it is familiar amongst Souldiers. And a Sergeant hath the same office in our Warre that Hyperetes had amongst the Græcians. What his duty and service should be, is declared out of Suidas. I here were in estimation and worth of their places is expressed by the same Xenophon. The Sergeants in warre, saith he, worthy of no lesse honour, than messengers, matter of warre, vnderstanding, quick, swift, industrious, and voide of feare; be sides endued with all qualities requisite in the best sort of men; & that they were to accustom themselves to refuse no manner of service, but willingly vndergo whatsoeuer is laid vpon them by their Commanders. These Sergeants attended ned, and alwayes expected his command. During the fight, they retired to some place, where they might bee ready at call; for (as I said before) they could haue no place in front.

x Suidas in
Eclitico.
y Xenophon.
Cyrop. lib. 7.
z Xenoph.
Cyrop. lib. 8.
aa Diod.
ab Suidas in
the word Kereux.

10 A Crier.] Concerning the office of a Crier, Suidas hath taught vs, that he was to deliuer the Commanders pleasure by voice. Leo calleth him Mandator, from the Latine word, because he signified to the souldiers, Mandata, the commandments of the Capitaine. In exercise he stood at the head of the Troupe, taking from the Commander the words of direction, and making, as it were, proclamation of them to the Souldiers; and serued often, when neither Trumpet, nor signall might be giuen; he was afterwards also of great use. For in all times which required distinct signification of any sudden alteration in the Army, the Crier had his part alone. Xenophon telleth in the Græcians returne out of Persia, that Clearchus their General led them not against the enemy, both because their courages began to fall, and also because they were all the day fasting, and it grew somewhat late. But yet hee turned not out of the way, left he might seeme to flie; but holding on right forward, he came with the vanguard

c Xenoph. de
Eclitico.
Cyri
lib. 2. 277. B.

vanguard, to the next Villages by sunne-set there quartered; The very timber of the houles of some of those Villages was broken downe, and carried away by those of the Kings armie. The first therefore lodged themselves reasonably, the last being be-nighted euery man took vp his lodging as it fell out, and made a great noise, calling one after an other, so that the enemy heard it. Whereby it came to passe, that the next of them fled out of their tents. This appeared the next day, for neither was there carriage-beast, nor Campe, nor smoke neere at hand to be seene. The King also was terrified as it should seeme, with the access of the Armie. Which he declared by the next daies worke. Yet in the proccesse of night a feare seafed the *Græcians* themselves: and the tumult, and huileburly was such, as is wont, when men are possessed with feare. *Clearchus* in this distresse commanded *Telmides* the *Ælian* (whom hee then had with him, the best Crier of those times) after silence, to make proclamation, that the Commanders signified generally, that whosoever could bring forth the Author of this tumult should haue a * talent of siluer for his paines. After this narration may appeare, that the Crier performed that, which neither Trumpet nor other signall could doe, the terror rising in the night (which is the time of confusion and disorder) and neither could the Trumpet giue any certaine sound to remedy the perill, nor any other signall be discerned by reason of the darkness; and this seruice was done by the Crier amongst his own folke. His seruice against the enemy is declared in the fact of * *Cleocritus* the Athenian Crier who after the fight, betwixt *Thrasybulus* and the 30. Tyrants (wherein *Critias* and *Hippomachus* were slaine) with a proclamation to the Citizens, recomended them to *Thrasybulus*, and was cause that the Tyrants were deposed, and had their authoritie abrogated by the people. The like seruice was done by a Crier in the behalfe of the *Græcians* against the *Persians*, about the time of the battaile of *Plataea*. The storie is this: * When the *Græcians* vnder the conduct of *Leotychides*, the *Lacedæmonian*, and *Xanthippus* the *Athenian*, had gathered a flecte of 250. Gallies together to the end to deliuer the Islanders, and the Cities of the Continent of *Asia* the lesse, out of the seruitude of the *Persians*, they sailed out of *Delos*. The *Persians* then remained at *Samos*. But hearing of the approach of the *Græcians*, they left *Samos*, and put roe to *Mysale* a City of *Ionia*. And because they perceiued their shippes vnfit for fight, they drew them on land, and fortified the place, where they landed, with a wadden wall, and a deepe trench. Neuertheless they sent for foote forces, from *Sardes*, and other the next Cities, and assembled to the number of a 10000 men; And made prouision for all things necessarie for warre, therather, because they suspected the *Ionians* would reuolt. *Leotychides* hauing put his flecte in order, sailed towards the *Barbarians*, that were in *Mysale*, and dispatched away before a shippe, wherein was a Crier, who had the shrillest voice in all the Armie. Him he commanded to saile vp close to the enemy, and to proclaime aloude, that the *Græcians* hauing overcome the *Persians* at *Plataea*, were now come thither to deliuer and set free the *Græcians* Cities of *Asia*. This was done by *Leotychides* to the end to diffuser the *Asian* *Græcians* from the *Barbarians*, and to raise a tumult in the enemies Campe. Which also came to passe. What seruice could be of more importance, then to set a distaff betwixt the enemies? It was done by the voice of a Crier. More examples I could alledge, but these may suffice. The Criers place was alwaies to attend the Commander in the head of the Traupes, vnlesse in the time of fight; at which time his voice could not be heard but gave place to the noise of Trumpets and clashing of armes.

11 A

a About a 176 pounds statling
Int. Poll lib. 9.
cap. 6.430.437.

b Xeneph.
Editor. Græc.
lib. a. 474.

c Diodor. Sic.
lib. 11. 260.

11 A Tetragonall forme] That is of foure equall sides, or foure square; But we must understand (which Ælian after teacheth) that there are two kinds of Tetragonall, or square bodies military, one in number, the other in figure. In number, when the tagma hath 16. in front, and 16. in flankes. In figure, when the number of the front is greater, then the number of the flankes, and yet front and flankes stretch out an equall length of ground; as in the squares of horse, whereof Ælian speaketh to be greater. This last square is at this day called a square of ground, because the space of ground, which containeth the length of the front, stretcheth out inly as far as the space of ground, which containeth the depth of the flankes. It is caused by the difference of distance, which is betwixt the Souldiers in front, and betwixt the Souldiers in flankes. In front, being close fight, the distance betwixt Souldier, and Souldier, is but a cubite; that is a foot, and half. The distance betwixt Souldier, and Souldier, in flankes is two cubits, or three footes, which proportion will giue no more, then halfe so many men in flankes, as in front, and line, which meeteth the front, and flankes, shall be all one.

Ælian. cap. 10.

12 A Pentecostarchie] The word is a command of 500, and that was sometimes the number. In the Macedonian Phalange, it comprehendeth a 12 men. The cause of difference is the difference betwixt the file of the Macedonians, and the file of the ancient *Græcians* (whereof I haue spoken before) the odder 12 men coming in by the fifth doubling of 16. And the number being so neere 500, though somewhat above, the name of Pentecostarchie is still retained, because it was then in vse, and no other more fit could be found.

13 A Chiliarchie] The command of 1000 men according to the name; Ælian giueth it a 1024. from the doubling of 512. The Tribunes of the Roman Legions are by the *Greek* Historians termed Chiliarchs; yet is there a great difference; for the Chiliarchs haue no more command, then ouer their Chiliarchie consisting of 1000 men, and sometimes of more, as here in Ælian of 1024. But euery Tribune had in his turne the command of the whole Legion. And againe there being 12 Tribunes, to euery Legion (which at first had in it 3000. afterwarde 4000. then 5000. and in the time of Vegetius 6000 men) he should a Tribune be called a Chiliarch and be a Leader of a thousand; a Tribune could not haue above 500 for his command; as in Polybius 3. fo that euery Tribune but 4000) not above 200 and odder. But the Roman manner of warre and ordering of troups, differed much from the *Græcians*; and the *Græcians* in rearing a Tribune charge of a Tribune. Our Coronells, for their command, of a Regiment come neerer to the *Græcians* Chiliarchs; yet ours differ in that they haue Companies in their owne Regiments, which the *Græcians* Chiliarchs had not, and where * *Q. Curtius* saith that a Quint, Curtius was first instituted at Babylon by Alexander, as a reward for seruice, lib. 5. 166. it seemeth to be otherwise. For as I haue said in no other Author, so find I, that Chiliarchs were long before Alexanders time. * Xenophon reporteth, that Cyrus did encourage his soldiers to be valiant, promised to the Taxiarchs to make them Chiliarchs, to the Lochagi to make them Taxiarchs, to the Decharches to make them Lochagi, to the Pempadarchs to make them Decharches; and that Cyrus made them Chrylantus a Chiliarch of horse in regard of his worth, and forwardnes in seruice. * Xenoph. Cy. 1. 10. 11. And afterwarde he calleth * Phranuchus, and Afadatus, Chiliarchs of horse, and Artabatus and Arageras Chiliarchs of foote; * Polyenus witnesseth that in Iphicrates his time the Athenians had Chiliarchs, and Pentecostarchs, so that the institution of

a Plutarch. in
Romule.
b Salust. in
Iul. Cæsar.
c Veget. lib. 2.
cap. 22.

* Xenoph. Cy.
10. lib. 2. 43.

* Xenoph. Cy.
1. 10. 11.
* Polyenus lib. 3.
h Iphicrates
of 510.

a Arrian.lib. 3.
64. C.

b Diod. 5. ul.
lib. 18. 63.

of Chiliarchs could not be referred to Alexanders being as Babylon, considering it was in use before; And * Arrian reporting the same story, saith not, that Alexander first brought up Chiliarchies there, but that he ordained two Lochi in every horse troupe (where to that day there had been none) and two Lochagi to command them. Indeed b Diodorus Siculus, writes thus concerning a Chiliarch. Antipater, saith he, lying upon his death-bed declared Polyperchon Protector of the Kings (being the eldest of those, that had served Alexander in his wars, and much honoured of the Macedonians) and his own sonne Cassander the Chiliarch, and second man in authority. The place and institution of the Chiliarch first grew to name and honor under the Persian Kings. So writes Diodorus of this Chiliarchy which Antipater bestowed upon his sonne Cassander. Which notwithstanding seemes much to differ from the common Chiliarchy of the Phalange, whereof Curtius speaks. For Diodorus saith, he was next to Polyperchon in authority. Where in the Phalange there were many Commanders, namely, the Merarchs, the Phalangarchs &c. above the Chiliarchs. And that he saith, the institution of this Chiliarch came from the Persian Kings, when the Chiliarchs of the Phalange had their beginning from the Græcians, and were ordinary in Phalanges, as I have shewed. Lastly where Diodorus reporteth, that it had the increase and advancement of honour from the Persian Kings, he beweth plainly, it was not Alexanders invention. And the same Diodorus speaking of the death of Ochus King of Persia telleth, that he was poisoned by Bagoas his Chiliarch in the time of the reigne of Philip, Alexanders father. This Chiliarch then I take to be the same, that the Generall of an armie is with us. And I can hardly be persuaded, that Antipater would bestow such a little place to his sonne Cassander.

c Thucyd.lib. 1.
33.

14. A Merarchy | The command of a part or halfe; for a Phalangarchy consisteth of two Merarchies. So that a Merarchy is halfe the Phalangarchy, and containeth 2048 men. This part is also called Telos, of which I have spoken in my notes to the seventh Chapter. And yet the word Telos is not alone used in bodies of foote. For c Thucydides, speaking of the fight by sea betwixt the Corcyraens, and Corinthians, telleth, that the Corcyraens gave the right wing to ten Athenian shippes, and having of their owne a 100 and 10 shippes, divided them into three Tele, every of which was commanded by one of their Generalls: so that Telos there signifieth not a certaine number of shippes, but a part of their fleet divided into 3.

d Arrian.lib. 1.
14. E. & 31. E
& 60. A.

15. A Phalangarchie | The command of a single Phalange. Of this kinde were the 4 Phalanges in Alexanders armie (as Takeit) which were led by Canos, by Perdiccas, by Craterus, by Amyntas, by Pholomy, by Meleager, and other, as Arrian hath; before Philip and Alexander gathered those forces together, where with Persia was subdued, the armies were of smaller number among the Græcians. Neither was it in many Cities might to raise 4000 men which go to the Phalangarchie of Ælian: If any did, they might well call it an armie (Strategia, and the Commander Strategos) and the name of Strategos, or Generall was usually given to him, that commanded in chiefe over an armie (though small) sent out by any City to warre. So then, as the Generall was called Stratagos, a Phalangarchie might also be called Strategia. I have before noted, that the sections of the Phalange are limited, and laid out by the Phalangarchies. And where there are 3 sections in a Phalange, the middle section is in the midst of the 4 Phalangarchies, 2 Phalangarchies lying on the one side, and 2 on the other. The 2 other sections are one betwixt the 2 Phalangarchies of the right wing, the other betwixt the two Phalangarchies of the left wing, for betwixt every Phalangarchie was a space or section.

16. A Diphalangarchie | The command of two Phalangarchies; this was one of the wings. Ælian gieth it no Commander ordinary, neither doe I remember, that I have

have read Diphalangarches of Diphalangarchia, as Phalangarches of Phalangarchia, Tetrarches of Tetrarchia. Yet was there one, alwayes that commanded the wings, appointed to that place extraordinaryly; So * Philip, at the battail of Cheronea, where he overthrew the power of the Athenians, and Thebans, and their Allies, I take he, one wing to himselfe, and gave the command of the other to Alexander his sonne being then young. And Alexander at Granicus commanded himselfe the right wing, and appointed Parmenio to the left. So in the battailes against Darius at c Issus in Cilicia, and at d Gaugamela in Syria.

b Arrian.lib. 1.
14. D.
c Arrian.lib. 2.
60. B.

17. Meros | Meros is a part by division, coming of the word, meiro to divide. And as before, Amerarchie, was halfe a Phalangarchie, so here Meros is halfe the fourth Phalange. Each then significth halfe, but to distinguish them, the one is called a Merarchie, that is a Commande of halfe, the other Meros, that is halfe: A distinction sufficient to know the one from the other. Two of these Meros make the Phalange consisting 16384 men. And these are the bodies militarie, which Ælian in this Chapter describeth, and which were in use among the Macedonians. The other Græcians of other bodies in their armies. The e Macedonians divided their whole city, into five bodies, horse and foote; every one of which was called Mora, or Moira. T their Generall was one of their Kings, for they had alwayes two. Every Moira, had a Polemarch (not Encomatarch). What the number of the Moira was, is uncertaine, by reason of the several reports, that Ephorus the historian, gieth 500 men to the Moira, Calisthenes 700. Polybius and others 900. f Diodorus Siculus, agreeth with Ephorus, and alloweth 500 men to the Moira. And g Xenophon numbere the Moira of the Macedonians, which Iphicrates, defeated hard by Corinth, to have been about 600 men. h The ischoliastes, of Thucydides, for the exact number of these bodies. The i Athenians, and their Chiliarchs, Pentecostiarchs, Taxiarchs, and Lochage, as I have said before. And with them were the Lochagi left, where with the Macedonians they were next the Polemarchs, but the number of the Lochos was not alike, as I have likewise before. Cyrus in k Xenophon hath these orders militarie, Myriarchs Commanders of ten thousand, Chiliarchs of a thousand, Taxiarchs of a hundred, Lochagi of twelve, which are also called Hexadarches. l Diodorus divideth not much from Ælian, sixe only in the number of the file, and the Officers of the file. For where Ælian hath ten to the file, Diodorus hath but ten; and Virbicius aloweth but two Commanders for the number of the Officers, in the Phalange they agree. And yet the names are not bicus, which the Lochagos, who likewise commandeth two files, thirte two men, Virbicius 25 men. The next in Ælian is a Tetrarch over sixteene men, and five men more, Pentecostarch over fiftie men. Virbicius hath next a Taxiarch, a Syntagmatarch, a Myriarch, a Chiliarch, a Merarch, a Phalangarch, and so hath Ælian. The m Myriarch that is the Leader of ten thousand men, Virbicius termeth him both. But Virbicius assigneth no more, then 16 thousand to his Phalange. Ælian 16 Taxiarchie, a Hecatontarchie, and a Lochage. What a proportion Leo makes, is to be seen in the fourth Chapter of his Tactics. Because he hath a mixture of the Roman and Greeke Orders, I remit the Reader to the booke.

The Tactics

So then *Ælian* hath in his *Phalange* of armed (besides the two *Diphalangarchi*) 1020. Officers.

<i>Dilochites</i>	512.
<i>Tetrarchs</i>	256.
<i>Taxiarchs</i>	128.
<i>Syntagmarches</i>	64.
<i>Penecostarchs</i>	32.
<i>Chiliarchs</i>	16.
<i>Merarchs</i>	8.
<i>Phalangarches</i>	4.
	1020.

I have set downe the figures of all the bodies described by *Ælian* as farre, as the *Phalangarchy*. The rest would haue bene troublesome to insert as requiring more paper, then would stand with any reasonable proportion; neither are they greatly needfull. For two *Phalangarchies* rayned in an even front, and in a convenient distance, will scoure out a *Diphalange*; foure in an even front with a like distance will make the fourfold *Phalange*. So that thereby the forme of it will appeare.

The precedence, and dignitie of place in the offices of the *Phalange*.

CHAR. X.

THe best of the *Phalange* Commanders is placed on the right wing, the second on the left wing, the third in valour in the right hand next the second *Phalange* toward the middle section. The fourth on the left hand next the first *Phalange* toward the middle section likewise. So the first and fourth *Phalange* haue Commanders of the first, and fourth worth: The second and third *Phalange* haue Commanders of the second and third worth. Now wee will shew by demonstration, that the first, and fourth worth, and valor, are equal to the second, and third; So that the Commanders in each wing are of valor alike.

The Leaders also of the severall *Merarchies* are thus disposed. The first hath his place in the head of the first *Phalange* on the left hand: The second on the right hand of the second *Phalange*: The third on the left hand of the third *Phalange*: The fourth on the right hand of the fourth *Phalange*. Also the Leaders of files in every *Tetrarchy* are so placed, that the Leader of the first file hath preeminence in valor and place; the Leader of the fourth file standeth next him: Then the Leader of the third file, and the Leader of the second file last. For then are *Dilochies* of equal valor when the first *Dilochie* hath the first, and fourth Leaders, the second *Dilochie* the second, and the third Leaders in valor and reputation. For it appeareth in the *Mathematicks*, that, when there are *Analogies*, or answerable proportions of foure magnitudes propounded, that, which ariseth of the first, and fourth, will counteruaile that, which ariseth of the second, and third magnitude. And because there are foure *Tetrarchies* in every *Syntagma*, wee may giue the Leaders of the *Tetrarchies* place according to the same proportion, as to place the *Tetrarch* of the first *Tetrarchy* on the right hand, giuing him the first place of worth on his left hand the *Tetrarch* of the fourth *Tetrarchy* in the fourth place of worth. Then again next him the *Tetrarch* of the third *Tetrarchy* in the third place of worth, and on his

left

of *Ælian*.

left hand the *Tetrarch* of the second *Tetrarchy* in the second place of worth. In like manner are the greater commands also to be proportioned.

Notes.

The former Chapter was of the Officers and of the bodies of the *Phalange*; this is of the place of every one, according to his worth. And first wee are to note, that all the ^a Commanders were placed in front of those, that they commanded; so that as they might direct, and lead them as occasion should require. For ^b Xenophon saith of Cyrus army, the *Decadarchs*, or file Leaders, had care of the files, the *Lochagie* of the *Decadarchs*, the *Taxiarchs* of the *Lochagie*, the *Chiliarchs* of the *Taxiarchs*, the *Myriarchs* of the *Chiliarchs*: So in the *Phalange* of *Ælian* the file Leader had the command of his file, the *Dilochites* of the file Leaders, the *Tetrarchs* of the *Dilochites*, the *Taxiarchs* of the *Tetrarchs*, and so the rest, till you come to the General, who cared for all, directed all, and under whom all the Commanders were. The General hath bene placed sometimes in the right wing, sometimes in the middle to be in the right wing betwixt the horse, and the foote. Hee addeth, this is the place, which gouerneth the whole battaile, from whence the salying out is most direct, and free. Therefore he standeth betwixt both, that hee might both gouerne horse, and foote with counsell, and with authority exhort them to fight. ^c Cyrus in his battaile against *Crestus* took his place in the right wing, betwixt the right hand point of the battaile, and of the horse, that were ranged in the wing; ^d Alexander the great in his battailes took the same place; ^e Timoleon in his fight against the Carthaginians placed himselfe in the midst of the battaile. ^f Diodorus Siculus saith, that it is the manner of the Scythians, that the King should stand in the middle of the *Phalange*. The like doth ^g Arrian affirme of the Persians, and saith, that *Darius* had his place there. ^h Leo also giueth the middle of the battaile to the General. And thereunto place the battaile over which he would haue him to command.

1 The best of the *Phalangarchis*] This ordering of the *Phalangarchis* the best on the right hand wing, the second on the left, the third next him in the left wing on his right hand toward the middle section: The fourth in the right wing on the left hand of the first toward the middle section thus, 2 3 4 connect out of a Geometrical proportion, which proportion giueth law to the ordering of the rest of the Commanders. The rule together that which ariseth of the first, and fourth, is equal to that, which ariseth of the second, and third. As 2. 8. 14. 20. each exceedeth the other, 6. The addition of 2. to 20. begetteth an equal number to 8, and 14. added together. So is it in all proportions, that haue the same equalitie of excess one above another. Out of this rule *Ælian* deriveth the giuing equalitie of strength in the Leaders to every body chosen for worth, and valour: and the preferments of the field haue bene held according to their worth, and that the first *Phalangarch* is most worthy, the second next, the third next, the fourth least deserving of the foure. If you should place them, as *Ælian* doth, in a ranke successively one after another, the best before the first *Phalangarch* in the right wing, the second before the next *Phalangarch* in the same wing, the third before the other two *Phalangarches* to command the left wing, the fourth would be great; the third and fourth not being able to match the worth of the first, and second.

The Tactics

But if you place the best Phalangarch before the first Phalangarchie on the right wing, the second before the second Phalangarchie of the left wing, the third Phalangarch next him before the third Phalangarchie on the left wing, toward the middle Section; the fourth before the fourth Phalangarchie of the right wing toward the same Section; the valours of the Commanders, will be equal in both wings. For as in the number 1. 2. 3. 4. one and 4. make 5, as many, as is made by joining 2 and 3 together, so the worth of the fourth Phalangarch joined to the worth of the first will arise as high in true valuation, as the worths of the second and third joined together. And where the Phalangarchie on the left corner of the left wing is called the second, and the next Phalangarchie standing in the same wing the third; it is to be understood that it is second in dignity, not in succession of number for the fourth Phalangarchie in dignity standeth in place and number next the first; 3 and the second Phalangarchie hath the last place of the whole Phalange. Their places then are after this manner according to Ælian.

$$\begin{array}{ccccccc} 2 & & f & & 3 & & 4 \\ b & & c & & d & & e \\ & & & & & & a \end{array}$$

For the understanding whereof, you are to note, that

- signifieth the first Phalangarchie.
- the second Phalangarchie.
- the third Phalangarchie.
- the fourth Phalangarchie.
- the Section of the right wing.
- the Section of the left wing.
- the middle Section.
- the place of the first Phalangarch.
- the place of the second Phalangarch.
- the place of the third Phalangarch.
- the place of the fourth Phalangarch.

2 The Leaders of the Merarchies] As the Phalangarchs so are all the other Commanders of the severall bodies placed by square, and the same observation to be had, of the dignities of the place, that was in the Phalangarchs: and these 4 Merarchies (for Ælian speaketh of no more than 4) must stand thus.

$$\begin{array}{ccccccc} P & M & M & P & P & M & M \\ 2 & 2 & 3 & 3 & 4 & 4 & 1 \end{array}$$

P, standeth for Phalangarchs.
M, for Merarchs.

Robortellus confesseth he findeth these Merarchs so placed in a written booke, and it is the true placing. The figures, he setteth downe out of his owne wit (as he termeth it) carry with them no favour of Ælians proportion. Patricius likewise seemeth to have mistaken this proportion in the figures he hath set downe, of which not one is right. I will referre the Reader to their booke, admonishing him onely of the mistaking. But Ælian placeth here but 4 Merarchs; what order shall be for the other seven? I have alwayes thought Ælian defective in this place, neither could I hitherto finde any man, that hath brought light to cleare the doubt. Patricius that purposely disconfesseth of this place of Ælian

of Ælian.

Ælian, speaketh of bestowing 4 Merarchs onely, as though the rest were to be throwne away from the Phalange. Robortellus seeking to bestow all 8, bestoweth them indeed, but not according to Ælians proportion, which notwithstanding he would seeme to follow. His figure is this.

$$\begin{array}{ccccccc} P. M. M. & M. M. P. & P. M. M. & M. M. P. \\ 1. 8. 4 & 3. 6. 3 & 4. 5. 2 & 1. 7. 2 \\ \text{The right wing} & & & \text{The left wing:} \end{array}$$

The Middle.

The proportion is his, as I said, and not Ælians. For Ælian placed the first Merarch in the right wing; he placeth him in the left; Ælian the second in the second Phalangarchie, he in the fourth; Ælian the third in the left wing, he in the right; Ælian, the fourth in the fourth Phalangarchie, he in the first. The rest are so jumbled together, as though any thing else had bene sought for, rather than proportion. I take not upon mee to over-rule any doubt; but if amongst the rest I enterpose mine opinion, I hope, I shall not incurre iust blame. Thus then: seeing Ælians meaning is by evenesse and worth of number of both wings to finde out the worth of the Commanders of both, if I so distribute them, that the number of the one side shall counterbalance the number of the other, I cannot much stray from Ælians meaning. The figure following will doe it.

$$\begin{array}{ccccccc} P. M. M. & M. M. P. & P. M. M. & M. M. P. \\ 1. 5. 1 & 4. 8. 4 & 3. 7. 3 & 2. 6. 2 \\ \text{The right wing} & & & \text{The left wing.} \end{array}$$

The Middle.

In this figure I have observed precisely the place, that Ælian gave to the 4 Merarchs. The first standeth on the left hand of the first Phalangarch; the second on the right hand of the second Phalangarch; the third on the left hand of the third Phalangarch; the 4th on the right hand of the 4th Phalangarch. The rest I have added, and divided according to the placing of the first: So that the number that ariseth of the addition of both wings, is alike, and the proportion held. In all the rest of the bodies, where there is a Command over 4, the keeping of the proportion hath no difficulty. So every Phalangarch commandeth over 4 Chiliarchs; every Merarch over 4 Pentecostarchs; every Chiliarch over 4 Syntagmatarchs; every Pentecostarch over 4 Taxiarchs; every Syntagmatarch over 4 Tetrarchs; every Taxiarch over 4 Dilochites; every Tetrarch over 4 files; In all which the Commander, which hath the right, hath the first place, he that hath the points of the left hand, the second place; he that standeth on the right hand next to him, the third place; the left place is his, who standeth next to the Commander of the right point on the left hand. And for the place of the Phalangarchs, and of 4 of the Merarchs, and the file-leaders, and of the Tetrarchs, they are laid out by Ælian. The rest appear by these, and are to be squared by the same rule of proportion, as Ælian admonished.

The whole wing, through the middle

1	3
5	7
4	2
4	6
4	2
23	23

The Merarches alone

5	7
1	3
4	2
4	6
4	2
18	18

The distances to be observed between Souldier and Souldier in opening and shutting the Phalange.

CHAP. XI.

WE are now to speake of *distances* both in length, and depth betwixt Souldier, and Souldier, as they stand ordered in Battaile. The *distances* vary in three sorts. For first they are placed in thinner distance for some speciall causes. And a Souldier so placed taketh vp ² 4 cubits. But in ² *Denfation* or *closing* he taketh vp 2 cubits. ³ In *Conspiration* or *shutting*, one cubit.

Denfation then, or *closing* is, when we draw wide distances close together, and by *side-men*, and *followers* (that is both in length and depth) gather vp the bodie of the *Phalange*: so notwithstanding that the souldier yet hath libertie to moue, and turne about.

Conspiration, or *shutting* is when the *Phalange* by *side-men* gathereth it selfe yet closer together, then in *Denfation*; so that by reason of the nearnesse there is left no *declination*, or turning of faces either to the right, or left hand.

The use of *Closing* is, when the *Generall* leadeth the *Phalange* against the enemy. Of *Shutting* when he would haue it stand fast (and as it were *locked up*, and *ferred*) to receive the charge of the enemy.

Seeing then there are 1024 *File-leaders* in the front of the *Phalange*, it is plaine that in their ordinary array they take vp in length 4096 *Cubits* (that is ten furlongs, and ninetie six cubits) In *Closing* five furlongs, and forty eight cubits. In *Shutting* two furlongs, a halfe, and tower and twenty cubits.

Notes.

AFTER Souldiers are armed, and distributed into bodies military, the next care is to be had of their Mouing. For as a man, let him be neuer so well proportioned, and strong, if he pace disorderly, and either set too great strides, or reele here, and there, or so mince, and tread out his steps, as if his legs were bound together, groweth hereby deformed, and not onely loseth his comeliness, but his activity withall, and possibility to performe anything by strength: So is it of an Armie, that hath either too great distances, or is thronged up, or pressed too close together. ² Too much thronging hindeth, as it were, the souldiers hands, and taketh away the use of his weapons, as on the other side falling one loose from another, and standing or mouing too farre asunder, maketh the Battaile weak, and disjointed, and subiect to the enemies entry, and easie to be broken. The meane betwixt both was brought in by King Philip, King of Macedonia, who first constituted, and raised the Macedonian Phalange, and invented the distances of opening and closing the same; imitating the ² setting of Targets (called Synaspismos) practised by the old Heroes at Troy. One of his discipline sprun: the distances mentioned here by Elian: which are of three sorts: The first are large distances of

^a Caesar Celsi, goli liba. b Plautarch in Philoprene. ^c Diodor Sic. lib. 15. 117. ^d Polyb lib 12. c. 24. C. ^e Leon. cap 17. § 61. ^f Polyb lib 17. c. 14. ^g Leon. cap 7. § 14.

1 Four Cubits: Which amount to six foute. For a Cubit containeth a foot and a halfe. This distance was used in marching, or else in solemne pompes and shewes. And the souldier hauing a pike of ² 14 Cubits or 21 long, whereof one halfe lay forward on his shoulder, and the other halfe backward, it was requisite he should haue a reasonable large distance, both in file and ranke, to the end, that in turning this way, or that way,



Shutting
shoulder

followed the walls with King Pompey, and gained many a victory, whereby this occasion tolled out to succour; and as they excelled the yonger sort in greatnes of spirit, and military experience, so meeting with the run-a-waies, they bitterly teuled, and taunted them for their cowardice; Then ² setting themselves close, and ioyning their Targets together, they repressed, and held the enemy short, who now seemed to haue the victory in his hands. Finally killing Ephialtes, and many other, they droue the rest into the City. A memorable service of the use of Targets, and of the Synaspisme of the Macedonians, which was not used, but when they either gave upon, or received the charge of the enemy. And the Targets so knit together served for a wall (as it were) to the whole Phalange, and by them the souldier was

ph.
lib. 7.
led by
ides,
Thur.
§ 192.
in in
lib. 14.
D. C.
Sicul.
§ 75.

* Synaspismos

The distance to be observed between Souldier and Souldier in opening and shutting the Phalange.

CHAP. XI.

WE are now to speake of *distances* both in length, and depth betwixt Souldier, and Souldier, as they stand ordered in Battaille. The *distances* vary three sorts. For first they are placed in thinner distance for some speciall causes, and a Souldier so placed taketh vp 4 cubits. But in 2 *Denfation* or *clousing* he taketh vp 2 cubits. 3 In *Conspation* or *shutting*, one cubit.

Denfation then, or *clousing* is, when we draw wide distances close together, and *side-men*, and *followers* (that is both in length and depth) gather vp the bodie the *Phalange*: so notwithstanding that the souldier yet hath libertie to move, d turne about.

Conspation, or *shutting* is when the *Phalange* by *side-men* gathereth it selfe yets together, then in *Denfation*; so that by reason of the nearnesse there is left *Declination*, or turning of faces either to the right, or left hand. The use of *Clousing* is, when the *General* leadeth the *Phalange* against the enemy, *shutting* when he would haue it stand fast (and as it were *locked up*, and *serred*) receive the charge of the enemy.

Seeing then there are 1024 file-leaders in the front of the *Phalange*, it is plain that 4 in their ordinary array they take vp in length 4096 Cubits 5 (that is ten furlongs, and nine six cubits) In *Clousing* five furlongs, and forty eight cubits. In *shutting* two furlongs, a halfe, and tower and twenty cubits.

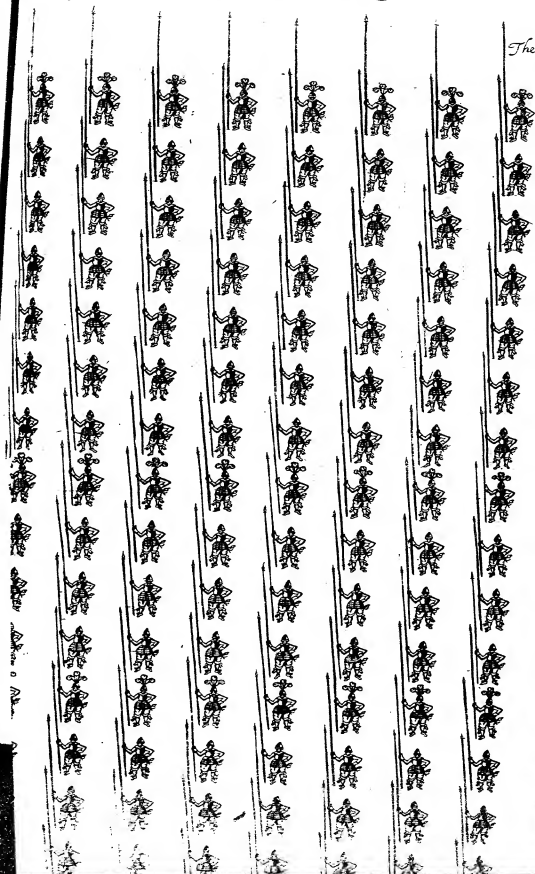
Notes.

After Souldiers are armed, and distributed into bodies military, the next care is to be had of their Mouing. For as a man, let him be neuer so well proportioned, and yet, if he pace disorderly, and either set too great strides, or recle here, and there, or so ce, and tread out his steps, as if his legs were bound together, and he thereby deformed, and not onely loseth his comelinesse, but his activitie withall, groweth hereby deformed any thing by strength: So is it of an Armie, that hath either too great distances, or Souldiers hand, and taketh not the use of his weapons, as on the other side falling back, and disordered, and subiect to the enemies entry and easie to be broken. The meane that hath was brought in by King Philip, King of Macedonia, who first constituted, and invented the Macedonian Phalange, and invented the distances of opening and clousing, imitating the setting of Targets (called Synaspismos) practized by the old Greeks at Troy. Out of his discipline sprang the distances mentioned here by Elian: Four Cubits) which amount to six fute. For a Cubit containeth a foute-halfe. This 4 distance was used in marching, or else in plowme pannes and shewes, the souldier having a pike of 14 Cubits or 21 long. whereof one halfe lay forward on his shoulder, and the other halfe backward, it was requisite he should have a reasonable large distance, both in file and ranke, to the end, that in turning this way, or that way,

The first distance ordinary of face in file armie in ranke

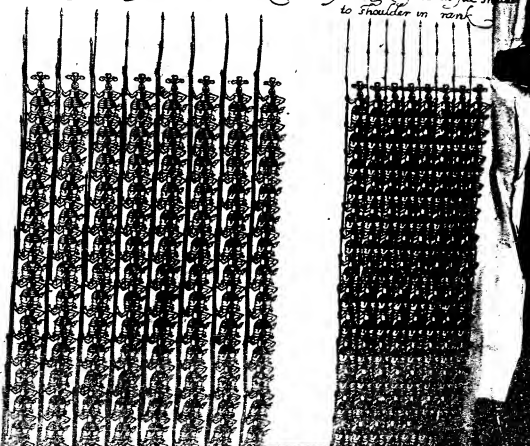
Fig. 20

The Rearre



The second distance called *clousing* or *sering* 2 fute in file armie in ranke

The third distance called *shutting* or *sering* 2 fute in file armie in ranke to shoulder in ranke



The distances to be observed betwene Souldier and Souldier in opening and shutting the Phalange.

CHAP. XI.

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Densation then, or *closing* is, when we draw wide distances close together, and by *side-men*, and *followers* (that is both in *length* and *depth*) gather vp the bodie of the *Phalange*: so notwithstanding that the souldier yet hath libertie to moue, and turne about.

Constipation, or *shutting* is when the *Phalange* by *side-men* gathereth it selfe yet closer together, then in *Densation*, so that by reason of the nearenesse there is left no *inclination*, or turning of faces either to the right, or left hand.

The vse of *Closing* is, when the *General* leadeth the *Phalange* against the enemy. Of *shutting* when he would haue it stand fast (and as it were *locked up*, and *serred*) to receiue the charge of the enemy.

Seeing then there are 1024 *File-leaders* in the front of the *Phalange*, it is plaine that ⁴ in their ordinary array they take vp in length 4096 Cubits ⁵ (that is ten furlongs, and ninetie six cubits) In *Closing* five furlongs, and forty eight cubits. In *Shutting* two furlongs, a halfe, and twenty cubits.

Notes.

AFTER Souldiers are armed, and distributed into bodies military, the next care is to be had of their Mouing. For as a man, let him be neuer so well proportioned, and strong, if he pace disorderly, and either sit too great strides, or reele here, and there, or so mince, and tread out his steps, as if his legs were bound together, groweth hereby deformet, and not only loseth his comeliness, but his activitie withall, and possibility to performe anything by strength: So is it of an Armie, that hath either too great distances, or is too close vp, or pressed too close together. ⁶ Too much thronging hindeth, as it were, the souldiers hands, and taketh away the vse of his weapons, as on the other side falling one loose from another, and standing or mouing too farre asunder, maketh the Battaille weakke, and disjointed, and subiect to the enemies entry, and easie to be broken. The meane betwixt both was brought in by King Philip, King of Macedonia, who first constituted, and raised the Macedonian Phalange, and invented the distances of opening and closing the same; imitating the setting of Targets (called Synaspismos) practised by the old Heroes at Troy. Out of his discipline sprang the distances mentioned here by Elian:

which are of three sorts. The first are large distances of Fourteen Cubits. Which containe 18 fixe foute. For a Cubit containeth a foute, and a halfe. This ⁷ distance was used in marching, or else in solemn marche and shewes. And the souldier having a pike of ⁸ 14 Cubits or 21 long, whereof one halfe lay forward on his souldier, and the other halfe backward, it was requisite he should have a reasonable large distance, both in file and ranke, ⁹ to the end, that in turning this way, or that

The first distance ordinary of file
in file armie in ranke

Cap. 11.

The Rear

The second distance called closing
in file armie in ranke

a Capite de bat-
gallibus
b Phalanx in
Phalange vocat

c Diodor Sic.
lib. 16. 331.
d Polyb. lib. 11.
e 4. C.
f Tacit. cap. 17.
g 14.
h Polyb. lib. 17.
i 24. A.
j Leo cap. 7.
k 14.

a Castr. de b
gall. lib. 5.
b Plutar. lib. 1.
Philoponem

c Diodor. 8. c.
lib. 17. 512.
d Polyb. lib. 12.
264. C.
Leo cap. 17.
9. 61.
e Pol. lib. 17.
264. A.
f Leo cap. 7.
5. 54.

and raised the Macedonian Phalange, and invented the distances of opening and closing the same; imitating the ^a setting of Targets (called Synaspismos) practised by the old Heroes at Troy. Out of his discipline spring the distances mentioned here by Ælian: which are of three sorts. The first are large distances of

1 Four Cubits; which amount to six fathoms. For a Cubit containeth a fathom an half. This distance was used in marching, or else in solemn pompes and shewes. And the souldier having a pike of 14 Cubits or 21 long, whereof one halfe lay forward on his shoulder, and the other halfe backward, it was requisite he should have a reasonable large distance, both in file and ranke, to the end, that in turning this way or that way,

way, or that way, or moving out of his place (for no man in his marche, can alwaies hold his ranke) he offended not his next neighbours therewith. This distance our exercise at this day calleth open order. The next distance is of

Two Cubits. Or three fathoms. The name of it in Greeke is Pycnolix, that is thickning. In Leo it is called Sphinxix, (knitting together) in our moderne exercise Order. And it is, when from the distance of 6 fathoms, we draw our Phalange both by file, and ranke, so close, that the souldiers stand but 3 fathoms one from another every way. This distance is used, when the Army approacheth neare to the enemy (and onely cometh not to charge) that it may be ready to shut, and locke it selfe for the charge, which is performed in the last distance of

One Cubit. A fathom and a halfe. This is called Synaspismos, ioyning Targets to Targets. For, as I before shewed, the pikemen of the Macedonians used also Targets with their pikes, and in charging the enemy closed so neare in front, that their owne Targets touched one another. This kind of fight the Egyptians used in Xenophon (which he calleth locking together of Targets) and by means thereof had the advantage against the Persians. The Partian horse likewise coming to charge Crassus with their flames: After they perceived the depth of the locking of Targets, and the settlednesse, and stedfastnes of the Roman Phalange, they retired, and durst not come to hands with them. And Diodorus Siculus writes that Alexander besieging the City of

Halicarnassus, there was in the City, and in service of Darius one Ephialtes an Athenian, a man of great valour, and strength of body; He by the permission of Memnon General of Darius Armie, determined to make a sally. And taking to him 2000 mercenarie souldiers, all chosen men, and giuing brands flaming with fire to one halfe, and reseruing the rest for fight, he opened the gates, and fell out, throwing fire vpon the engines of battery, which soone caught a mighty flame; And marshalling the rest into a thicke and deepe Phalange, himselfe led on, and was the first that fell on the Macedonians coming to aide, and to quench the fire. Alexander aduertised hereof speeded to the medley; & ordered first the Macedonians in front, after them other choice men, for seconds; and in the third place men of extraordinarie account for their prowesse, himselfe leading them on sustained the enemy, which seemed vnresistible, and sent others to flake, and put out the fire, and to preferue the Engines. The fight was hot, and albeit the Macedonians found meanes to quench the fire, yet had Ephialtes the better in the fight; who both himselfe killed many with his owne hands, and the towers from the walls furnished with many Catapults annoyed greuously the Macedonians. In so much that some falling in the place, other some forsaking their ground by reason of the number of Engine Darts that fell thicke amongst them, Alexander himselfe was reduced to extremitie. Here the old souldiers of the Macedonians; although otherwise freed from such seruice in regard of their age, hauing of a long time followed the warres with King Philip, and gained many a battaile, were by this occasion tolled out to succour; and as they excelled the younger sort in greatnes of spirit, and military experience, so meeting with the run-a-waies, they bitterly reuiled, and raunted them for their cowardice; Then setting themselves close, and ioyning their Targets together, they repelled, and held the enemy short, who now seemed to haue the victory in his hands. Finally killing Ephialtes, and many other, they drove the rest into the City. A memorable seruice of the use of Targets, and of the Synaspismos of the Macedonians, which was not used, but when they either gave upon, or received the charge of the enemy. And the Targets so knit together serued for a wall (as it were) to the whole Phalange, and by them the souldier

Xenoph. Cyrop. lib. 7. 178. A.
It is called by Thucydides, Synaspix, Thucyd. lib. 5. 393.
b Appian. in Parthians. 144. A. 184. D. C.
Diod. Sicul. lib. 17. 575.

* Synaspismos

was

was defended from the misuse weapons of the enemy, and his body covered even from the piercing of the sword. Synapsimos then, or flanking, is that assistance in the Phalange, which bringeth the soldiers Target to touch one another, and is limited by *Elían* to a cubit (that is a foot and a half) betwixt side-men, and side-men in the front. What distance the followers should have, *Elían* setteth not to be done in plaine words, but implies, that they should hold their 3 foot still, in that he saith the Phalange in composition gathereth the side-men closer, then in desension. but seeketh nothing of followers. * Polybius teacheth it more plainly; who gives them three foot distance from the Leader, both according to the Macedonian and Roman discipline, and that for the use of their arms: with whom *Elían* also agreeth * afterward. In what manner the Targeters made their closings, and how their Targets were cast from the backe, where they hung, to the left shoulder, I have before noted in the second Chapter, and therefore thinke it needlesse here to repeat. Now for the ground, that a Phalange taketh up in each of these orders, *Elían* sheweth it in the words following, allowing the Phalange.

4 In * ordinary array four thousand cubits] *The Phalange in open order*, saith *Elían*, takes up 4096 cubits of ground. This would be to understand in front, or length; for in depth it hath no more, then 64 cubits; every souldier (which are in number, 10 in file) possessing 4 cubits of ground in his open order; a cubit is the part of the arme, which reacheth from the elbow to the middle fingers end, and is as much, as a foote and a halfe. In front then, there being 1024 File-leaders, we must alott to each of them four cubits of ground; to the thousand 4000 cubits, and to the odd twenty foure 96 cubits. For foure times twenty foure makes 96, which together comes to 4096 cubits, and to six thousand one hundred forty foure foote.

5 Ten furlongs and ninety six cubits] Where this space is squared out by tenne furlongs, we must understand, that a furlong contains 4 foure hundred cubits, and 4096 being divided by 400 the quotient is 10: — that is ten furlongs and 96 cubits, as *Elían* saith. Which measure of ground the Phalange of Armed taketh in open order. Of these furlongs * seven and a halfe go to a mile, by which accounts the front of the Phalange of armed in open order taketh up one mile, a quarter, and 246 cubits, measuring it by fette it amounts to 6130. In closing (which is named Order, and is the next distance) because the souldier is allowed but 2 cubits, that is halfe so much, as in open Order, the dimension will not exceede five furlongs; 48 cubits; that is 2048 cubits in all, which amounts to halfe a mile, halfe a quarter, and 173 cubits, in fette, 3072. In flanking 2 furlongs and a halfe, and 24 cubits; that is a quarter of a mile and 274 cubits.

The arming of the Phalange.

CHAP. XII.

THe Phalange is to be armed with Target and Pyke. The best Target is the Macedonian target made of brasse, and somewhat hollow, and having 8 eight handfulls in Diameter. The Pyke ought to be no shorter then 8 cubits; and the longest no longer, then a man may well vse and wield in handling.

Notes.

IN the second Chapter of this booke we handled the diversitie of armes, used in the Phalange. This setteth forth the choice, that is to be made for matter and fashion, and what

what site is best of pike and target. For the other armor of the armed (whereof I spake, in my notes to the second Chapter) is (no question) to be fitted to the body of him, that shall beare them. He giveth then to the armed a target, and a pike, the target the Macedonian target, the matter whereof was first of brasse. I have shewed, that the Macedonian target was of brasse, and that they were called by reason of the bearing such targets Chalcipides Brasse-targets. I am induced to thinke, that, as Philip borrowed many other things in warre from the Lacedemonians, so he borrowed this kinde of target from them. For they by the ordinance of Lycurgus, were imagined to have no other matter in their target, then brasse. * Xenophon gives a reason why they were made of brasse. For Lycurgus was of opinion, saith he, that such a Target was most fit for warre, because it is soone brought to flint, and it gathereth not rust easily, two great commodities in armes. For a beitt the chiefest considerations be surenesse, and strength, yet is not the beauty to be neglected, which shining doth principally set out. Besides that it dazzleth the eye of the enemy, and strikes an amazement into his minde. * Xenophon much admires Agesilaus, that he so armed, and clothed his armie, that they seemed to be nothing, but brasse, and nothing, but scallor. The brasse he speaketh of, were the brasse targets of his souldiers, which covered the most part of the body, and were chiefly the object of the eye, without that, that any other weapon was at that time of brasse. Therefore, as I said, I am of opinion that the brasse Target came from the Spartans to the Macedonians. The Brasse-targets *Elían* would have

1 Somewhat hollow] If they should beare straight out without any bowing, besides that they were uneaste, they would lie kicking out from the body, and not cover it much. The arme, or shoulder, that is inserted into the Target, is bowing. And the target somewhat bowing fits it for ease, and slopeth more toward the body to cover it, and is more pliable to be carried. But the hollownesse ought not to be much. He would have it also

3 Eight handfulls in Diameter] The Diameter in a circle is a right line, which is drawne from one side of the circumference to the other passing through the Center, or middle point of the circle, dividing the circle in two equal parts. Here the Diameter of the target is taken for the exact breadth of the target, which ought to be, according to the Macedonian manner, eight handfulls, or two foote, that is 32 fingers. For foure handfulls go to a foote, and foure fingers to a handfull. A Leo gives it three Spithames, that is 26 fingers, if he meane the great * Spithame, which is of twelve fingers. And the lesse compassing a handfull he cannot meane. For so should the breadth of the target be no more, but three handfulls, a breadth insufficient to cover any mans body. Whether it them is the better will appear in triall. The Diameter that serves to cover the bodie from the upper part of the necke to the middle part of the thigh, is enough in these round targets. That, which is more, is rather troublesome, then fit for use. And I am of Iphicrates judgement in targets, that performing the covering of the bodie, they should be as light, as may bee, least the shoulder be over-laden with unneedfull weight. Which regard I preferre the Target of *Elían*, before that of Leo; *Elían* reaching up to the height of the necke from the middle of the thigh; Leo carrying a handfull more in breadth, which in the circumference groweth to a good proportion of weight and greatnesse.

4 No shorter then 8 Cubits] That is 12 foote. Short pikes are unfit long have a great disadvantage. With the long pike a man is able to strike, and kill his enemy, before himselfe can be touched, or come in danger of a shorter, the pike keeping the enemy out so farre, as the length is. The experience of the battaile of * Sorano sheweth it, where Vitelliozzo Vitelli discomfited the Almains only with the advantage of pikes an arme longer than theirs. Against long pikes, this policie was used by Cleonymus the Lacedemonian King, as * Potienus tells. Cleonymus besieging *Adessa*, and having over-throwne

a Polyb. lib. 17. 764. A.

b *Elían* c. 14.

c See Polyb. lib. 12. 664. C. 100 ca. 17. 571.

d Suidas in Pictura.

e Suidas in lib. 6. Leo cap. 17. 829.

a Xenophon de rep. Laced. 886. A.

b Plutarch in Crasia. c Xenoph. in Agesilaus. 519. B.

d Leo cap. 6. § 21. e Iul. Pollux lib. 2. cap. 4. § 2. calculi it a pance.

f Patricius Pa. rel. particula lib. 2. cap. 6. Polyen. lib. 2 in Cleonym.

throwne the wall of the City, the pikemen of the City failed out, whose pikes were each 16 cubits in length. Cleonymus closed his Phalange in depth, and commanded the file-leaders to lay away their pikes; and when the pikemen of the enemy came to charge, to seize upon their pikes with both hands, and hold them fast, and the followers to passe thorough by the file-leaders sides, and maintaine the fight. The file-leaders laid hold on the pikes, and the enemy stroue to recover them out of their hands. In the meane time, the followers passing thorough the ranke of file leaders to the front, slew the enemies pikemen, and got the victory. *This was Cleonymus device against long pikes, which notwithstanding derogates nothing from the length of pikes more, than from shortnes. For the same policie might have prevailed as well against short pikes, as long, each, as soon as the enemies have seized upon them, growing to be of no use. But that the longer pike is to be preferred before the shorter, I have showed before by reason: and therefore of armes made by Iphicrates amongst the Athenians, and by Philopomen amongst the Achians, will be warrant enough so to hold. In the length notwithstanding ought to be a reasonable consideration, that it exceeds not the measure of his strength, that shall beare the pike.*

The worth that the File-leaders, and next followers should be of

CHAP. XIII.

THE File-leaders (as the Commanders of files of the Phalange) are to be the choice and flower of the Army, and to excell the rest as well in stature, as in experience and martiall skill. For this Ranke knitteth and bindeth in the Phalange, and of all other yeeldeth greatest use. For, as a sword taking to the edge as a weight, and sway, the swelling yron towards the backe exhibiteth thereby more violence in piercing, so in a Phalange the Ranke of File-leaders is the edge it selfe, and the multitude of after-commers is the swelling, and sway, and increase of weight.

Consideration must be had likewise of those that follow in the second Ranke. For their Pikes reach ioyntly over the front, and being next in place they are alwaies ready for use. And the File-leader falling, or being wounded, the next follower stepping to the front in his place, holdeth together, and preferueth the tenor of that Ranke vnbroken.

Furthermore, we are to order the third and the rest of the Ranks according to reason, and as the valour of our souldiers shall require.

This Chapter sheweth how the Souldiers are to be ordered in every File: whereof, because I have before spoken sufficiently in my Notes to the fifth Chapter, and the words of this Chapter carry no difficultie, or obscuritie with them, I will forbear to treat any further.

CHAP. XIII.

Of the strength of the Macedonian Phalange, and length of the Souldiers Pikes.

CHAP. XIII.

THE Macedonian Phalange hath of enemies beene thought vnresistible, by reason of the manner of embattailing. For the Souldier with his Armes standeth in close order, or shutting, when he is ready for fight, occupying two Cubits of ground. And the length of his Pike is sixteene Cubits according to the first institution, but in truth it ought to be foureteeene Cubits; whereof the space betwixt the hands in charging taketh vp two Cubits, the other twelue lye out from the frame of the Battaile. Those in the second Ranke, that stand next to the Leaders (loosing foure Cubits in the Phalange) haue their Pikes reaching over the first Ranke ten Cubits. Those of the third Ranke eight Cubits, of the fourth Ranke six cubits, of the fifth 4 cubits, of the sixth 2 Cubits. The Pikes of the other behind cannot attaine to the first Ranke. And seeing five or six pikes are charged over the first Ranke, they present a fearefull fight to the enemy, and double the

Cap. 14.

Pikes reaching over the Front



consequence, to make some principall Commanders not onely in front, but also in the Reare of the Battaile, for the causes before mentioned.

Notes.

THE strength of the Macedonian Phalange, which consisted principally in the protection, and charging of pikes, and knitting together of Targets, is here set downe. The whole Chapter seemeth to have beene taken out of Polybius, who handleth the same argument, and almost with the same words, but that Ælian, and he differ about the number of Cubits, which the Pikes take up reaching over the front of the Phalange.

The Macedonian Phalange, hath beene thought to be vnresistible. The strength of the Macedonian Phalange appeareth no way better, than by the conquests it hath made. King Philip was the inventor of it; and by that invention raised the kingdom of Macedonia from the poorest, to the powerfullest, and greatest kingdom of Europe; and (that I may use the words of Diodorus Siculus) finding the Crowne, at his comming to it, in bondage to the Myrians made it afterward Lady of many great Nations, and Cities; and purchased to himselfe, to be declared General of Greece.

H

throwne the wall of the City, the pikemen of the City failed out, whose pikes were each 16 cubits in length. Cleonymus closed his *Phalange* in depth, and commanded the file-leaders to lay away their pikes; and when the pikemen of the enemy came to charge, to seize upon their pikes with both hands, and hold them fast, and the followers to passe thorough by the file-leaders sides, and maintaine the fight. The file-leaders laid hold on the pikes, and the enemy strove to recover them out of their hands. In the meane time, the followers passing thorough the ranke of file leaders to the front, slew the enemies pikemen, and got the victory. This was Cleonymus device against long pikes, which notwithstanding derogates nothing from the length of pikes more, than from shortnes. For the same policie might have prevailed as well against short pikes, as long, each as soone as the enemies have seized upon them, growing to be of no use. But that the longer pike is to be preferred before the shorter, I have shewed before by reason: and the reformation of armes made by Iphicrates amongst the Athenians, and by Philipomen amongst the Achaians, will be warrant enough so to hold. In the length notwithstanding ought to be a reasonable consideration, that it exceede not the measure of his strength, that shall beare the pike.

weight.

Consideration must be had likewise of those that follow in the second Ranke. For their Pikes reach joyntly over the front, and being next in place they are alwaies ready for use. And the File-leader falling, or being wounded, the next follower stepping to the front in his place, holdeth together, and preferueth the tenor of that Ranke vnbroken.

Furthermore, we are to order the third and the rest of the Ranks according to reason, and as the valour of our souldiers shall require.

This Chapter sheweth how the Souldiers are to be ordered in every File: whereof, because I have before spoken sufficiently in my Notes to the fifth Chapter, and the words of this Chapter carry no difficultie, or obscuritie with them, I will forbear to treat any further.

CHAP. XIII.

Of the strength of the Macedonian Phalange, and length of the Souldiers Pikes.

CHAP. XIII.

THE Macedonian Phalange hath of enemies beene thought vnresistible, by reason of the manner of embattailing. For the Souldier with his Armes banded in close order, or shutting, when he is ready for fight, occupying two Cubits of ground. And the length of his Pike is sixteene Cubits according to the first institution, but in truth it ought to be foureteeene Cubits; whereof the space betwixt the hands in charging taketh vp two Cubits, the other twelue lye out from the front of the Battaile. Those in the second Ranke, that stand next to the Leaders (loosing foure Cubits in the Phalange) haue their Pikes reaching ouer the first Ranke ten Cubits. Those of the third Ranke eight Cubits, of the fourth Ranke six cubits, of the fifth 4 cubits, of the sixth 2 Cubits. The Pikes of the other behind cannot attaine to the first Ranke. And seeing five or six pikes are charged ouer the first Ranke, they present a fearefull sight to the enemy, and double the strength of the fouldier standing fortified, as it were, with five, or six Pikes, and seconded with a maine force at his backe, as the figure sheweth. Moreover they that are placed after the sixth Ranke, albeit they push not with their pikes, yet thrusting on with the weight of their bodies, reinforce the strength, and power of the Phalange, and leaue no hope for the File-leaders to flie, or thist away. Some would haue the hinder pikes longer, then the foremost, that they of the third, and fourth Ranks might beare out the heads of their pikes equally with the first.

The Suprordinary Lieutenant of euery Syntagma must be a man of vnderstanding, ouerseeing the souldiers of his command, that they file, and ranke; and if for feare, or other occasion, any forsake their ground, he is to compell them againe to their places; and in Closing to put them (when neede requireth) as neare vp together, as they should stand. For it is a great strength, and assurance to the Phalange, to haue some principall Commander not onely in front, but also in the Rear of the Battaile, for the causes before mentioned.

Notes.

THE strength of the Macedonian Phalange, which consisted principally in the protection, and charging of pikes, and knitting together of Targets, is here set downe. The whole Chapter seemeth to haue beene taken out of Polybius, who handleth the same argument, and almost with the same words, but that Ælian, and he differ about the number of Cubits, which the Pikes take vp reaching ouer the front of the Phalange.

I The Macedonian Phalange, hath beene thought to be vnresistible. The strength of the Macedonian Phalange appeareth noway better, then by the conquests it hath made. King Philip was the inventor of it; and by that invention raised the kingdom of Macedonia from the poorest, to the powerfullest, and greatest kingdom of Europe; and (that may vse the words of Diodorus Siculus) finding the Crowne, at his coming to it, in bondage to the Syrians made it afterward Lady of many great Nations, and Cities; and purchased to himselfe, to be declared General of Greece.

c Diod. Sicul.
lib. 16. § 10.

a Appian, in
Synais. 97. E.
b Polyb. lib. 17.
763. E.

Greece. And first overthrowing the *Illyrians, Paeonians, Thracians*, and *Sythians*, after wars set upon the kingdom of *Perseus* to break it, after he had enfranchised the *Asian Cities of Asia*. And albeit death intercepted him, yet he left instructions to his sonne *Alexander*, that he needed no other allies to overthrow the Soveraigny of *Perthia*. After his death *Alexander* took his kingdom, and *Antiochus*, and not encountering, and vanquishing *Darius* in two great Battles, rase thorough Asia like a flood of fire: rearing a pierce like that resisted, or stood in his way, and laid the foundation of this kinde done, which (albeit afterward divided) continued long in his Successors. Neither was the experience of their invincibleness against the barbarous people only, but as much as against the *Grecians*, who till *Philip's* time were esteemed the chiefest of armies in Europe. This is cleare by the victories, he Macedonians obtained against the renowned Cities of Greece, both jointly and severally. *Philip* overthrow the *Phocians*, albeit the *Lacedemonians*, and *Athenians* joined with them. The same *Philip* at *Cheronæa* defeated the power of the *Thebans*, and *Athenians* joined with them. *Alexander* took and sacked the City of *Thebes*, that about that time was accounted the mightiest City of Greece. His Lieutenant *Antipater* foyled the *Lacedemonians* in a yet battell, and then their King *Agis*. *Antigonus* Tutor of King *Philip* the sonne of *Demetrius*, broke an Army of the *Lacedemonians* and *Peloponnesians* at *Scalania*, and chased out of Greece *Cleomenes* the last brave King of *Sparta*. Albeit they were not beaten in the field by any Nation, but only by the Romans, and yet the judgement of *Polybius*, doth in this also prove it selfe good. For where the Romans had these victories against the Macedonians, he asseigneeth this to be the cause, that the Phalange at the time of the fight had not the proper place, ground enough, and can meete the enemy with a right front, he holdeth it not possible to be toyed, being divided, and in places uneven, he is of opinion, and experience hath taught, it may easily be put in a route. *Plutarch* comparcth it for strength (so long as it is one bodie), and maintaineth the *Synsymmetrie* jointly to an invincible battell; being diffenced, he saith, it looseth the force in the whole, and in every man particular, both in regard of the manner of arming, and also because the violence of it consisteth rather in knitting of all parts together, than in particular of any mans valour. Three battails (to plain termes skinneth), I give the Romans to consist, and then foyle the Macedonians; Once against King *Philip*, the sonne of *Demetrius*, and then against *Antiochus*; the third against *Perseus* the sonne of King *Ptolemy*. For the first overthrow, wherein they were beaten by *Philip*, he saith, that the Romans used the Phalange, and not using the whole, and most to him for that part of the Roman Army, that joined with him; but the other winge comming into the field, fit rather for a march, than a fight, and not being able to order themselves Phalange-wise, were soon defeated, and the Roman victorious, fell upon the rout of the right winge, where *Philip* was, and had now gotten the victory, and then on the field. *Antiochus* was not skilful in the ordering of a Phalange, true, but not so much worse, than his Phalange, and being to fight with *L. Scipio*, where he had the ground full scope, an hee needed the front of the Phalange, by making it a disadvantage of match: the front of the Romans, and after his horse were beaten, gave facilitie to the enemy, as on another case shall see. *Perseus* joining battails with *Paulus* *Emilius*, where the Phalange continued in the right figure, few many of the Romans, and forced them to retire, but following on too closely, he came to an

even, and rough ground, wherein the Phalange being diffenced, left spaces, and branches for the Romans to enter and defeat it. So long then, as the Macedonian Phalange had fit ground, and the right property of embattailing, it stood fast against the Romans the greatest souldiers that ever were, being in their hands, that knew not how to use it (as a sword in the hands of a child) it yielded to time and fortune. The cause of the strength of the Phalange is assigned to be

2 The manner of embattailing: Which consisteth principally in ordering of Targets, and pikes; in closing of the Targets by *Synsymmetrie*, and in joint charging of the pikes; which lying out thicke from the front, besides the horror of the sight, give also an impossibility to enter the Phalange. I have alledged the judgement of *Emilius* *Plutarch* in *Emilio*. *Polybius* thinketh nothing can resist the force thereof. *Livy*, albeit many concerning the sight presented by a Phalange, when the pikes lie so charged out of the front. *Emilius* giveth his judgement thus of the Romans, yet in the selfe same fight between *Perseus* 764. A. and *Emilius* giveth his judgement thus of the Phalange: The second Legion (saith he) ininuated it selfe into the middle empty place, and so broke afunder the Phalange. Neither was there any more evident cause of victory, then the sights in divers places at once, which first troubled the Phalange in turning many waies, and afterward plainly disjoynted, and scattered it; whose forces being vnited and rough strained to be with the pikes immouable through length and weight, it entangled it selfe with confused crossings. If at one time you charge it both flanke, and reare, they fall afunder like a ruinous building. As then they were compelled many waies to answer the Romans, and so to breake their battaile into many parcells. And the Romans vpon the first opportunitie of a breach straight waies conueighed in their troups, who if they had met the enemy in front, had runne vpon the pikes, as in the beginning it hapned to the *Pelignans*, being too forward to cometo hand, and could not haue resisted the Phalange fast shut, and ferred vpon the encounter: thus *Livy* concerning the Phalange. Who albeit a Roman, holdeth the same opinion that *Polybius* doth. And in another place telling of *Philips* encamping, he saith, he was lodged in a woody plot, which was vnfit for the Phalange, especially of the Macedons, which vnlesse it call the pikes, as it were, a muniment before the Targets, (and that cannot be, but in open ground) is of no great use. So then if Pikes may be charged out before the Targets, the Phalange is of great use. But, that I may not seeme to rely vpon bare opinion, let vs heare by an example, or two, the experience of the Pike, and Target of the Macedonian against the Roman armies. When *T. Quintus Flaminius* the Roman Consul had druen King *Philip*, and his army from the *Streights* neare *Antigonis*, seeing that the enemy kept himselfe with his strength, and abstained from the field, he determined to try the Cities of *Thessalia*, and being thought. And the enemy made his resistance, that way, the Consul would hardly haue beleueed, he could. For he imagined that all his labour should be in throwing downe the walls. If once he found passage for the Army to enter, there would after be nothing else, but flight and slaughter, as is wont in wonne Cities. But after that part of the wall was throwne downe with the Ramme, and the Army entred the City by the breach, it was the beginning of a new and fresh labour. For the Macedonians, that were there in Garrison, being many, and chosen, thinking it also a glory to them, if they could defend the City, rather with

armes and valor, than with wiles, *setting* themselves close together in a deepe *Phalange*, when they perceived, that the Romans began to enter the breach drewe them out, the place being cumberlome, and hard to make a retreat. The *Consul* much offended therewith, and thinking that shame concerned not only the delay of winning one Citie, but also the state of the whole warre, (which for the most part dependeth vpon moments of small matters) purging the place which was heaped vp with the fall of the halfe-ruined wall, aduanced a Tower which in many stories was stuffed with multitudes of armed men, and sent besides *Cohorts* vnder their Ensignes to breake with maine force (it it were possible) the body (they call it the *Phalange*) of the Macedonians. But the kinde of weapons and fight was more aduantageous for the enemy, than for the Romans; especially in that place, which was narrow, and streighted with the small space of the ouerthrowne wall. When the Macedonians, *setting* themselves close, had charged pikes of a great length before their front, and the Romans, after their darts throwne in vaine against the *testudo* compacted, as it were, of the thicke knitting together of the Targets, had drawne their Iwards, they could neither come vp close, nor cut a funder the pikes. And in case they cut the heads of, or broke any, the Reale amongst the rest of the whole pikes filled vp the roome with their sharpe fragments. Ioyne that that part of the wall, which was yet whole, secured the enemies flanks on both sides; neither needed they much ground in retiring or advancing to charge, which things are wont to cause the breach of array. There also fell out a chance which increased their hopes, and spirits. For the Tower being driuen on vpon a rampier, that was not well rammed vnderneath, but had loose earth, one of the wheeles sinking deeper into the ground than the rest, made the Tower to nodd, & lie of one side, that both the enemy beleued it would fall, and they within it were put in a pitifull feare. When nothing succeeded well, the *Consul* was euill appeaied, that the Macedonian souldiers, and kinde of Armes, might seeme matchable to his, and seeing no great hope of speedy winning the Citie, and that the place was vsit to winter in, raised his siege. So here the Macedonian souldier is not only equalled, but also preferred before the Roman, and that only by reason of his armour, the Pike and Target. An other experience fell out in the battail between Perseus, and *Emilius*, whereof I speake in this Chapter. The storie is this: The Romans comming to ioyne battail with the Macedonians, and not able to come vp to them by reason of the length, and joint use bearing of thicke pikes. There was one *Salinus* a Captain of *Pelignans*, who took the Ensigne of his Company from the Ensigne-bearer, and threw it into the Macedonian *Phalange*. The *Pelignans* ranne in heapes to the place (for it is not lawfull, nor honest, for the *Italians* to forsake their Ensignes) where the medley brought forth wonderfull effects. For the *Pelignans* fought with swords to put by the pikes, and to presse them downe with their Targets. And ceasing vpon them to pull them out of the hands of the Macedonians. The Macedonians contrary wise, maintaining their charge with both hands, and striking such, as approached neare, thorough the bodies, armes and all, neither Target nor Carae, being able to sustaine the violence of the blow, turned topsy-turvy the bodies of the *Pelignans*, who not with reason, but with the rage of wilde beastes, threw themselves desperately vpon wounds, and vpon certayne, and fore scene death. So the storme falling, the followers began to slacke. And yet they fled not, but retired to the mount called *Olacrus*. I will out of *Appian* ioyne a third experience in the battail of *Antiochus*

against

against *L. Scipio*, which I likewise touched before in this Chapter. As soone, as the Horse, and Chariots of *Antiochus* were put to flight by the Roman horsemen, and by *Eumenes*, his *Phalange* of foote being destitute of horse, first opened, and receiued the light-armed, (that had all this while fought in the front) into the midst of it. Then after-ward againe closed. And when *Domitius Scipio's* Lieutenant, encompassed it round with horse and light-armed, which he might easily doe; being neither able to charge the enemy, nor yet to countermarch in so great depth, as it carried. It grieved them much, that their long experience notwithstanding to arrows, and darts at all hands. Yet, baring out a multitude of pikes and still made a countenance, as though they meant to charge, keeping themselves for all that within their Ranks, as being footmen, and heauy armed, and they were loth to breake the thickeness of their battail, which forme they could not now alter. The Romans also, durst not approach them, and come to sword, fearing their experience in warre, and closeness of array, and desperation. But none was throwne in vaine, falling amongst a troupe so closely put vp together, that they could neither auoide, and decline any thing throwne, nor giue way, albeit they saw it coming. At last being weary, and irresolute what to doe, they retired easily, with a threatening countenance notwithstanding, and in good order, and not deliuering the Romans of feare, who durst not yet come neare, but sought to annoy them aloofe; till the Elephants placed in the Macedonian *Phalange*, being affrighted, and not to be ruled by their Governours, troubled all, and gaue occasion of flight: *hitherto Appian*. Out of these three examples, the truth of that, which *Antiochus* saith, is to be seene, that is, that the Macedonian *Phalange* cannot be forced, or resisted by an enemy, (taking with all *Polybius* his caution) if it be in the right posture, and figure, and haue such ground, as is fit. The Romans the best souldiers of all antiquity were repulsd by it at a siege, forced to retire in a battail, durst not come neare it, after they had gained the field of the rest of the Army. And the *Consul* *Emilius*, a man that had seene much seruice, and fought many a battail, and was one of the best Generalls of that time, confessed, he neuer was so fearefull a fight, as when he beheld the *Phalange* advancing into the field, the bodies ioyned, the Targets fetted, and locked together, darting out fire like lightning, the front rowne with couched, and charged pikes, and armed with yron, and threatening present death to him, that durst approach.

3 Occupying two Cubits of ground] We may not take it, as though the souldier betwixt file, and file had two Cubits, or three foote of ground. For we learned before, that in locking vp the *Phalange*, the distance betwene man, and man in front was but a Cubit. But it is to be understood betwene ranks and ranks. For *Polybius* saith, that the souldier ought to haue room for the use of his weapon, which cannot be, without granting him three foote behind, the pike being some-times to be pulsd forward, some-times to be drawne backe, sometimes otherwise handled, as occasion of fights shall require.

The length of the Pike is 16 Cubits] A Sixteene Cubits, which is twenty four foote, is a great length for a Pike, and it verifieth the words of *Livy*, 5. 1. & cap. 6. that the Macedonian Pike is vnwealdy, by reason of the length, and weight.

H 3

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right line after a file of the armed in such manner, as the armed are before embattailed.

Ælian in the beginning divided the foote into three parts, Armed, Targeteieres, and light-armed. To the armed he hath given place, and maketh the Phalange so consist of them, the light-armed herangeth in the reare of the armed, what shall become of Targeteieres? for he speaketh not a word of placing them. By that I read in Artian I would think, they were placed amongst the light-armed, and next to the armed. First because Ælian saith, many number them amongst the light. Then I see the Hypaspistis placed betwixt the Horse, and the armed in Alexanders fields at Granicus, at Issos, and at Gaugamela: Lastly Leo in the passage before recited, when he placed the light-armed without the Horse, he joyneth Targeteieres with them, for their safeguard. Cytus likewise placeth them next the armed in the reare; and after them the Archers.

Yett haill they not be 16. The file of the light-armed is lesse in number, then the file of the armed. For if they should be 16 in file, the number being but halfe to the armed, they should not be able to make about 512 files, and breeding there by a disproportion both in placing, and correspondence one to an other, not equall the length of the Phalange. Besides standing eight in file, and in the reare, their flying weapons will bee sent with more force against their enemies; in as much as the hindermost of them are nearer the enemy by twentie foure foote, which the last eight in a file of 16 deepe take vp. And misse weapons, the lesse their compasse is, when they are sent against a marke, with more violence they pierce. As they hurt not greatly, if the distance be too farre, from whence they come.

The names of the bodies of the light-armed.

CHAP. XVI.

Their names and degrees are these. Foure files of light-armed are called 1 a Syllasis of 32. men. Two Syllasies 2 a Pentecontarchy of 64 men. Two Pentecontarchies 3 a Century of 128 men. In every Century ought to bee 5 Superordinate men: an Ensigne, a Reare-commander, a Trumpetter, a Sericant, and a Crier. Two Centuries containe 256 men, and are called 4 a Psilogy. Two Psilogies a Xenagy of 512 men. Two Xenagies a Syltremma of 1024 men. Two Epixenagies a Stiphos of 4096 men. Two Stiphos an Epitagma of 1024 files. 8192 men. These ought also to haue 8 Superordinate men, whereof foure should bee Epixenagies, the other foure Syltremmatarchs.

Notes.

As the armed were distinguished, and severed into diuers bodies in the Phalange, so are the light-armed, in whom there ought to be no lesse order, then in the armed. A multitude mingled bringeth with it disorder, and confusion. Neither can any service be expected from them, who by apt diuisions are not cast into bodies fit for service. We haue before spoken of the names of the bodies of the armed, and noted, that they were not imposed with such propriety, that they could be applied to no other thing. At the first warre was made, and men fought (as wild beasts grapple together) led with furie, and rage, and not with skill, and he prevailed that was the strongest. Experience taught there were advantages in Time, in Place, in Order, in Instruments of fight, in placing of men, and

in

in other circumstances. Hence sprung the art of Warre, the diuers formes of weapons, and the figures of Battails. For the speedy framing whereof, the smaller bodies were invented, of which they consist. In building of a house, you first bring timber together, and other matter, and then of it frame walls, doores, windows, rafters, beames, and the roof, which must be all conioyned together, before the fashion of the house will appeare: So in an Army the prouision of men was first requisite, which being found, and brought together by Leauies, were armed, and after ordered into severall bodies; and these being compacted together, set out the frame and fashion of the Phalange. And as all things newly invented, stand in neede of names to ascerne them from other things; So names were given vnto the bodies not proper and fit; but such as Military wits thought convenient enough to signifie the things they meant. I haue noted it before in the names of the Tetrarchy, Taxis, Syntagma, and other, and it will appeare againe in this Chapter.

Rut hui

A Sylla



of *Helian*.
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 ng divided the foote into three parts, Armed, Targetieres, and
 med he hath given place, and maketh the Phalange to consist of
 he length in the reare of the armed, what shall become of *Tage*,
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 it th: light-armed, and next to the armed. First because *Helian*
 among it the light. Then I see the *Hypaspists* placed betwixt
 in *Alexanders* fields at *Granicus*, at *Liso*, and at *Gaugame*
 sage before recited, when he placed the light-armed without the
 tiers with them, for their safeguard. ^b *Cyrus* likewise placeth
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CHAP. XVI.

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 of 128 men. In every Century ought to bee 5 *Superordinarie*
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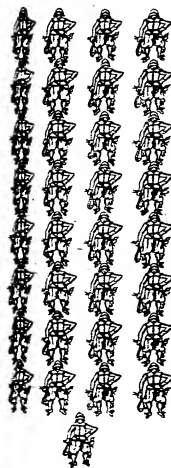
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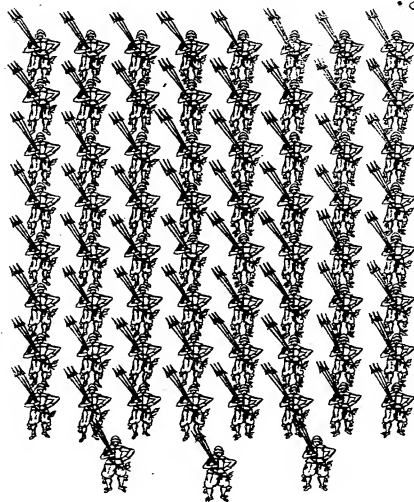
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 Chapter.

But here I must not be tedious in naming the bodies of the Army.

A Sylfustis

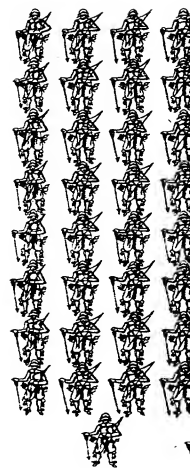


A Pentecontarchy



Cap. 16

The light Armed



The Front

right line after a file of the armed in such manner, as the armed are before embattailed.

Ælian in the beginning divided the foot into three parts, Armed, Targetieres, and light-armed. To the armed he hath given place, and maketh the Phalange to consist of them, the light-armed he rangeth in the reare of the armed, what shall become of Targetiers? for he speaketh not a word of placing them. By that I read in Artian I would think, they were placed amongst the light-armed, and next to the armed. First because Ælian saith, many number them amongst the light. Then I see the Hypaspists placed betwixt the Horse, and the armed in Alexanders field; at Granicus, at Issos, and at Gaugamela; lastly Leo in the passage before recited, when he placed the light-armed without the Horse, he joyneth Targetiers with them, for their safeguard. Cyrus likewise placeth them next the armed in the reare, and after them the Archers.

2 Yett shall they not be 16. The file of the light-armed is less in number, then the file of the armed. For if they should be 16 in file, the number being but halfe to the

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in other circumstances. Hence sprung the art of Warre, the divers formes of weapons, and the figures of Battails. For the speedy framing whereof, the smaller bodies were invented, of which they consist. In building of a house, you first bring timber together, and other materials, and then of it frame walls, doores, windows, rafters, beames, and the roof, which must be all conioyned together, before the fashion of the house will appeare: So in an Army the provision of men was first requisite, which being found, and brought together by Leades, were armed, and after ordered into severall bodies; and these being compacted together, set out the frame and fashion of the Phalange. And as all things newly invented, stand in neede of names to ascerne them from other things; So names were given unto the bodies not proper, and fit; but such as military was thought convenient enough to signifie the things they meant. I have noted it before in the names of the Tetrarchy, Taxis, Syntagma, and other, and it will appeare againe in this Chapter.

But here I may not pretermitt the curiositie of the Græcians in their appellations, and their plenty of speech, apt to give diversitie to things, that are divers. For where there are houses, amongst armed, and light-armed, which consist of the same number, and therefore, as it seemes, might well enough have beene comprehended under one name, they notwithstanding to avoid confusion, and for perspicuities sake have thought good to call them by sundry names. Thirty two armed men are called a Dilochi; 32 light armed are a Syttalis; 64 armed are a Tetrarchie; 64 light armed a Pentecontarchie; 128 armed a Taxis; 128 light, a Hecatontarchie. Our tongue will not afford such variety. For albeit in common speech we distinguish the kinde of souldier, yet confound we the name of the body, and of the command. A certaine number of Pikes under a Capitaine we call a company of Pikes; So many shot under a Capitaine we likewise call a company of shot. The Capitaines, one a Capitaine of Pikes, and the other a Capitaine of shot. A company of Curacers of horse, we call a troope of Curacers; as many Argoletes, a troope of Argoletes. The Commanders of either of them we terme Capitaines, the one of Curacers, the other of Argoletes. But let us come to particular explication.

1 Asyttalis] It cometh of Synistemi to stand together: and asyttalis is a standing together; which word albeit it may be extended to any kinde of people assembled, and standing together; yet it is here appropriated to souldiers; and more particularly to 4. files of light armed, consisting of 32 men, 8 men going to the file.

2 A Pentecontarchie] The command of 50 men. And so it was used of old. But the Macedonians gave 64 men to this command, and yet retain'd the name, because it was familiar, in such kinde.

3 A Century] Ælian calleth it a Hecatontarchie, the command of a 100 men. The name was usual before the Macedonians time, and it coneyned 100 men. But the Macedonians gave it 128 men. This was answerable to the Syntagma amongst the armed, and had the like officers. Yet whether it had a Capitaine, or no, may be some doubt; the rather because Ælian in this Chap. nameth no Commanders, but Sytrematarchs, and Epixenagies; and those he would have super-ordinary. For my part, I thinke they had Centurions also. For as every body of the armed had a head, so I would thinke it requisite also amongst the light-armed, especially seeing there was a Bringer-up, and other officers belonging to a Company, which unless they had a Commander, would become unprofitable. For if there were no Capitaine, to whom should the Crier, or Trumpeter, or Sergeant of the Centurie resort for direction? Adde, that the light were often drawne to the wings, to the front, or other places of service, which could not be done without Leaders. For to put a Sytrematarch, or an Epixenagies to lead a Century, were to leave the rest of the Centuries under them without a Commander. Besides, the

the Macedonians were very particular in their commands, and left no body without a *body*, which is the cause of the multitude of Commanders in the Phalangie. But they are not here mentioned. No more are the *Commanders of the horse in the division of the bodies of the horse, and yet I think no man will doubt, but the horsemen had Commanders.* Lastly, I find in the Grecian historie, Captaines of the light-armed often named. *Epithenes is said to be Commander of the Targetiers, in assist the Grecians had against the Persians.* *Stratocles commanded the Cretan Archers in the returne of the Grecians out of Persia.* *Eurybates Captaine of the Cretan Archers in Alexander's army was slain by the Thebans at the siege of Thebes.* *When Antiochus was Captaine of the Archers was dead, Omibito was chosen in his place. Mention is made also of Arrian of Clearchus the Captaine of the Archers.* And when Alian calleth the 4 Sytremma *Archie*, and the 4 Epixenages *super ordinary* (Εἰσάτοις) he might have said as much of all the other Commanders. And he saith expressly of the officers of the Centurie, that they were *super ordinary* (Εἰσάτοις).

4. A Phylagi] The word is a body of light-armed, which word, if it were taken, as it naturally signifieth, is common to, and comprehendeth all the bodies of the light-armed, whereof Alian speaketh in this Chapter. But here it is restrained to a body of light-armed, which comprehendeth 256 men, and 32 files, and so it is to be taken.

A Xenagie] That is, a command of strangers. Alian before saith, that a Syntagma was by some called a Xenagie. I have given my opinion there of the originall of the word, which I need not to repeat here; This onely I will note, that of all the bodies of the light-armed, no one hath a common name with the body of the armed, but onely the Xenagie. And Alian giueth also that body of the armed another name, calling it a Syntagma. The Xenagie hath in it 512 men, and 64 files.

A Sytremma] It signifieth a conglobation, or trouping together. Proper names are wanting for these bodies, and therefore such taken, as might at any hand signifie the thing meant. In continuance of time use hath gained a passage, and made them to be accepted as proper enough. The Sytremma containeth 1024 men, and 128 files. There is nothing to be found in Alian of the Chiliarchie of the light-armed; yet doth Arrian mention a Chiliarchie of Archers in the Army of Alexander.

An Epixenagie] A command above a Xenagie; As afterward in the command of the horse, there is an Ephipparchie above a Hipparchie. The word is improper and hard enough, but when it is rectified by use, what should we seek for more? It containeth 1024 men, and 256 files.

A Stiphos] It is derived from steibo, to thicken, and in penury of an other name, this body of the light-armed is called Stiphos, because they are thickened, and thronged together. There is in it 4096 men, and 256 files.

An Epitagma] Is the last body amongst the light-armed. The signification of Epitaxis is to place behind. From thence cometh Epitaxis, placing the light-armed in the Rear, which word is now used by Alian. Epitagma is derived from the same fontaine; and it is called Epitagma, not of placing behind, (for sometimes they were placed before, sometimes in the flanke, but it was the best name they could give to the whole light-armed. And yet it may be, that because all the light-armed in ancient time were placed behind, the whole masse was called Epitagma, as being placed after the armed in the rear. The Epitagma hath in it 1892 men, and 1024 files, for so many light-armed attend the Phalangie.

Eight super ordinary men should be super ordinary more than the rest of the Commanders, I conceive not yet, if Alian's meaning be, that these alone should command the light-armed, historie and practise of ancient times convince the contrary.

contrary. Besides where he nameth foure Epixenages, it agreeth with the number, that are in the Epitagma of light. But where he addeth foure Sytremmata, more to make up the number of the eight Super ordinary, it is hard to knowe, which foure he meant, considering there are eight Sytremmas in the Epitagma.

Now because the files of the light-armed are so embroiled, to the files of the armed, I thought good to set downe how the bodies of both agree, by comparing them together; files not in number of men, for in number of men they cannot well agree, because the file of the armed hath more, then the file of the light-armed. And the number of the armed in gosse is 16384, of the light-armed but 8192. And I will first begin with the Sytaxis, because it is the least body of the light.

The bodies of the armed,

A Tetrarchie
A Taxis
A Syntagma
A Pentecostarchie
A Chiliarchie
A Merarchie
A Phalangarchie
A Diphalangarchie
A Tetraphalangarchie

The bodies of the light-armed.

A Sytaxis,	4	files.
A Pentecostarchie,	8	files.
A Hecatomarchie,	16	files.
A Phylagie,	32	files.
A Xenagie,	64	files.
A Sytremma,	128	files.
An Epixenagie	256	files.
A Stiphos	512	files.
An Epitagma	1024	files.

The use of light-armed foote.

CHAP. XVII.

Archers, Archers, and all other, that use flying weapons, are good to begin the fight to prouoke the enemy, to breake and shatter armour, to wound, amoy, and beate downe a farr off, to difarray the enemy, to repulse their horse, to beat in their light-armed, to discover suspected places, and to lay Ambushes. Lastly these first vnder-taking the Skirmish, and continuing it with the rest, and seconding them, and seruing for speedie, and farr-off attempts, worke many, and great effects in fight.

Notes.

The arming, place, filing, bodies, and command of the light-armed are hitherto handled: Now followeth the use, and service they performe in the field. And first wee are to thinke of the body of an armie, as of the body of a man, that is composed of severall parts: of which some parts are of more use then other. Some being able to performe their function without the helpe of the other, some except the other helpe, can doe nothing to purpose of themselves. The parts of an armie are like. The armed are the strength of the field, and are therefore for the rest in extreme. The light armed with the armed, worke great effects; those which Alian speaketh of in this Chapter (and many more) without them they cannot so much as maintaine a place in the field. And Xenophon saith, Let them be neuer so many in number, yet dare they not stand or abide a few armed. In which respect, a place fitly sheweth howe they are sought for their service, to secure them from the assault of the horse, or of the enemies armed. Which place was either be- hind

a. Epit. ap. 20

b. Xenophon de
exped. Lib. 1.
lib. 1. 250 D
c. Xenophon de
exped. Lib. 1.
324 D
d. Arrian. lib. 1.
9. C.
e. Alian. lib. 1.
57.
f. Arrian. lib. 1.
23 B.

g. Polyb. lib. 1.
47. B.

h. Arrian. lib.
91. C.

after exp. 31

a. Xenophon C.
183. C.

bindes the Phalange (as Ælian here would haue it) or else in the wings, be-
hind the Phalange, or if they skirmish loose before the front, and choiced to be pre-
sented with the enemy, they retired into the intervals, and concealed themselves behind the
Phalange in safety. * Leo saith, if after their flying weapons spent, retreating thither, they
will be in more securitie, as a heepe rocke place, or the banke of a riuer, or a
high hill, or such other. Ono florius reports, that at the battaile of Agincourt in France
200 English Archers were posted in a meadow fenced with a deepe ditch; from
whence they assailed the French horse and foot, that they were a great helpe to the victo-
rie. The like happened before at Poitiers, where that braue Prince of Wales eldest sonne
of Edward the third, hauing to fight with the whole power of France under the leading
of their King, gave safeguards to his Archers, with hedges and ditches, and other strengths.
So that the French horse hauing no access to disorder them, were overwhelmed with the
impet, and stormes of their arrowes, and such a victory obtained by our nation, as might
match the most renowned of all antiquitie. To say nothing of the invention which Hen-
ric the fifth used against the horse of France for securing his Archers. The storie saith,
he devised flakes of two yards long, and armed both ends with pikes of iron, the one to
sticke into the ground, and the other to gall, and enter the horses bellies, in case they came
to charge our Archers home. By means whereof he carried the famous victory of Agin-
court. Thus for the assurance of the light armed, when they come to fight, without which
assurance, their seruice would be weake, and scarce worth the hauing. Their seruice then
according to Ælian hath many particulars. And they are good to

Prouoke the enemy. If the enemy be in a wood, a fenne, a hill, a fort, a towne, or
other place of strength, that admitteth no access, the manner hath bene to send out the
light armie to shew themselves, and with a brando to towle him out of his advantage, and
bring him into the field, where he may more easily be dealt withall. Examples are plenti-
full, but I will content my selfe with a Macedonian example. * Alexander leading his
armie against the Triballs, that had hid themselves in a wood, commanded his Ar-
chers, and Slingers to runne out, and to shoote, and sling amongst the Barbarians
to see, if he could towle them into the plaine. The Archers, and Slingers spared
not to let flie, and the Triballs being wounded with arrowes, threw themselves
out of the wood with all speed, to fall vpon the vnarmed Archers. Alexander
presently commanded Philotas with the Horse of vpper Macedonia to charge the
right wing, on which part they cast out themselves furthest. And Hercules, and
Sopolis with the horse of Bottia, and Amphipolis the left, himselfe stretching out
in length the Phalange of foote, & setting the rest of horse before the Phalange,
led against the mid of the enemy. As long as it was but a skirmish, the Triballs
had not the worit. But after the Phalange close serued came vp roundly to
them, and the Macedonians charged them no longer with darts, but pressed, and
ouerboore them with their horse, they fled thorough the wood to the riuer.

To beginne the fight. * Leo agreeth. If saith he, we haue light armed enough,
let them, before the armie ioyne, send their darts, and arrowes at the enemy, and
after the fight of the armed is begonne plie the flanke with their misse weapons,
that at once both their flanks may be assaulted. It hath bene and is now the
ordarie course to beginne the fight with the light armed. And because wee shall read
of no battaile almost wherein it was not so, I will forbear examples.

To wound a farre off. The light seruice great purpose, if the Generall desire not to
come neere to fight, but seek to annoy his enemy a farre off without danger of his own
folkes. * Liuy telleth of Cn. Manlius Volso, that being to make warre against the Gallo
Græcians,

Græcians, as he fled into the mountaine, and awaited the Romans there, and sought to
descend themselves, by advantage of the place, he prepared great plenty of darts, arrowes,
bolles, and small stones for slingers: and leaving his legions, fulliers behind, led his
light armed, against the enemy, that possessed certaine straights, by which his armie my-
ght passe. After some fight the Gallo-Græcians being not sufficiently armed, to defend
their bodies from the misse weapons, the light armed of the Romans forced the passage,
and following them euen to the Campe, where their Companions came to their aide, they
first drew them into their Campe, and after the Legionarie Soldiers coming up, they
wonne it. I haue before rehearsed the historie of Iphicrates, who with his Targetiers
(that came seldome to hand blowes, but plied the enemy with darts a farre off) ouerthrew
and leuie a whole Moira of the Lacedæmonians. The Acarnans, likewise with this
kind of fight, much incumbered Agellæus, that made an excursion into their Countrey.
The story is this, * Agellæus hauing taken a great prey, in the territory of the Acarnans,
rested that day, where he had taken it, being busie in selling of it. In the meane time many
Acarnan Targetiers assembled themselves together, where Agellæus was incamped
vpon the side of a mountaine, and with darting and slinging they forced his Campe to descend
to the plaine, themselves in the meane time being free from hurt. The next day A-
gellæus led away his armie. The passage out of the place was fraght by reason of the
mountaines lying about in a circle, which the Acarnans possessed, plying the Lacedæmo-
nians with darts, and stones, from the higher ground, and sometimes descending to the
skirts of the hills, they pressed the armie so, that it could not move forward. And when
the armed, foote, or horse, fell out vpon them, they profited little: For the Acarnans
retired immediately, to their strength. Agellæus perceiving it would be hard for
his armie to winde out of those straights, so long as the enemy so hung vpon them,
resolved to charge those on his left hand. For the ascent on that side was more
easie, both for his horse, and armed foote. Commanding therefore, his men to
charge, the armed of 29 yeeres of age first fell on, and the horse after them vpon
the spur. Himselfe followed with the rest. The Acarnans therefore, that
were defended, and busie at darting, were quickly put to flight, and many
flaine in seeking to remount the hills. But their armed foote, and most of their
Targetiers, stood imbattailed on the toppes, and from thence both threwe other
missiles, and lincd sauelines, wherewith they wounded horsemen, and killed
some horse. But being ready to be charged by the Lacedæmonian armed, they fled,
loosing some 300 in the flight. These light armed then, as long as they can keepe aloofe
from the enemy, annoy them fore by wounding (as Ælian saith) a farre off, as soone
as the armed come up, they are glad to quite their place, and save themselves by flight.

4 To disarray. So long as a battaile remaineth in order, no victory is gotten against
it. Breaking of array, and disbanding are companions of flight, and of forsaking the
field. If armed, that are endure the efforts of the light armed, must either keepe still
their order, and suffer themselves, to be knocked downe, and flaine, as they stand, or else
provide for themselves, by flight, or by yielding. For the light armed offend with their
misse weapons the one, or the other. An * example may be seene in the Egyptians in
Cræsus his battaile, who after the defeat of the rest of the armie, maintained yet the
fight, and yielded not to Cyrus, though he had now the victory. Cyrus at the first
charged their backs with his horse, and being not able to breake them, was faine to com-
mand his Archers, and darters, to shoote and cast their darts at them: wherby the Egyp-
tians after many wounds, and lesse of their people, were finally constrained to yield. A like
example is before alleaged of Domitius the Lieutenant of L. Scipio, who with misse
weapons alone forced the Macedonian Phalange to scatter, and take them to flight.

* Xenoph. Hist.
Græc. lib. 4.
513. D.

* Xenoph. Cy-
10. 1. lib. 7. 178.

* Appian. in
Syriac. lib. 3.

1. L. 10. cap. 14.
§ 127.

* Arrian. lib.

4. L. 10. cap. 14.
§ 104.
C. 10. Decad.
§ 113. 391 B.

1. L. 10. cap. 14.
§ 104. 151. B.

The Tactics

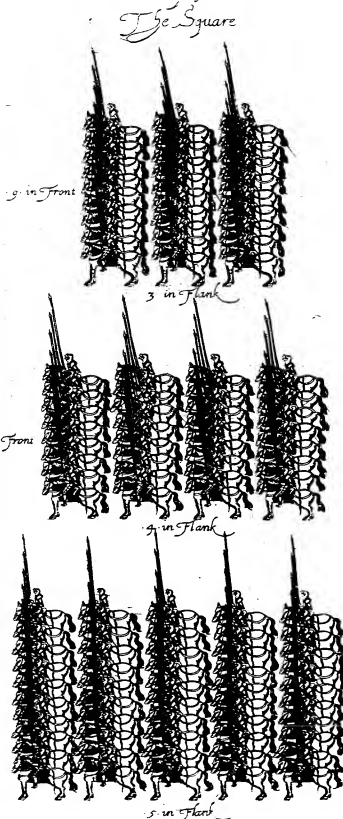
5. To repell the Horfe. The light armed alone, without a fure, threat to the armed, or the same place of strength, can a chreim repulſion of horſe. I have ſtood before the ſpoile of Caffius ſate Peſia, how the light armed were beaten into the Perſian horſe, and by the ſlew of wounds, they received, and with their fear, difordered the aimed. To be like happened in * Antonies retreat out of Perſia, the light armed being ſaine to ſtroude themſelves from the Perſian horſe within the Phalange of the aimed. Be it never ſo many, without ſome ſuch affurance the Horſe will ſoon overcome them; having this affurance their ſervice much afflicth the horſemen both in wounding them, and in killing of their horſe. I therefore * of ancient time it was ſuall to mingle horſe, and light armed together. For the enemies horſe if charged, cannot be able to reſiſt both. * A notable example is in * Hirtius: Cæſar ſaith he, having a journey in hand, and but a ſmall number of horſe, and legionary ſouldiers, was in his way ſet upon by the enemy abounding in ſtore of Horſe, and of light armed Numidians amongſt them. And when the ſouldiers of Cæſar tell out to charge, the enemies horſe galloped away, and the foot ſtood ſtill, till the Horſe with a full career returned to that uſe. This kinde of fight troubled Cæſar much, and would have troubled him more, had he not recovered hills that were not farre off, and by that means ſhaken of the melting enemy. And for repulſing horſe there is no better means for the armed foot, then with the light armed to line that part of the battail, where the horſe ſhall be about to give on.

6 To be at in the light armed.] The light armed being nimble and quick, and seeking advantages by changing of ground, can never be forced by the armed footmen, (who are charged with beaute furniture, and by reason thereof can make no speed) to seek succour in the battaile of their armed. Either they must be beaten in by the horse, or by the contrary light armed, as Elian hath here. The Horse are commonly to encounter with Horse, and the light armed with light armed, amongst whom the greater number prevaileth, their skill, and armes being alike. For the light being a farrre, many will sooner wound, or kill a few, then a few many, [aith] Scnophon: *Infights light bee at hand the better of the, the better minded will drive the other out of the field.* The 2^d Reason why the light armed are better able to stand the assault of the heavy armed, is because in their Camp. And that happened by reason their armour was fitter to cleave, then to fight at hand. So our Archers at the battaile of Crecly compelled the Genna crossebowes: for sake the light, the english bene being better in eye, then the Genna crossebowe. When they haue made the contrary light armed to quit their place, they are as liberty themselves to serue, where the most advantage may be had of their seruice.

7 To dispart, as sunbees are laid in, and lay ambushes [Sunbees placed are such for the most part, as ambushes are laid in. Ambushes are of two kinds, being laid either to endanger the enemies battell in the field, or to hinder, and dispoist his marche. The places, such as are removed from sight, and had neede of speciall discovery. As woods, mountains, forrests, rocks, banks of rivers, caues, hills hollow, and deepe waies, and the like. The most part of which are rough, and intricate, and carefull for the heavy armed, and horse. But the light armed are that are not cumberd with weight of arme, & able quickly to advance, or retire, are fittest to be close in such places, or to search if the enemy lie there. For the first kinde of ambushes were used, that both heavy armed, and horse haue ben employed. The warres of an Italian liuely afford plenty of examples herein. For the other, which is to let or cōfuser waies, there are none so fit, as the light armed, whose quickness, and expedition giueth them advantage to beat their enemy with their swift weapons, thought' grownd be neuer so unequal, and meanes to view any place without about any danger of their owne.

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8 For speedy and farre attempts] *A be wisie armed man is not fit for farre or sud-
daine attempts; he is armed for a firme and stedfast fight, and not for concussions.* A-
lexander, whensoever he was to use expedition, tooke with him the horse and light-arm-
ed, leaving the armed to come after. ^a So did he, when he oppressed Clytus, and Glau-
cias in their campe. ^b so when he possessed himselfe of the streights of Cilicia; ^c so in pre-
venting of the burning of Tarsus; ^d so in seeking to take the straights of the Vmians;
^e and the gates of Perlia; ^f and the rocks of Aorne. The same hath bene the manner of
other Generalls, as I have noted in other places. For when Celerity is requisite, who so fit
to be employed, as they who haue nothing to hinder their speed. ^g The Targetiere had but
a light target, and a spear; ^h the lightarmed but: their arms. ⁱ And what are they? bowe,
and arrowes, darts, and slings, which haue no weight in them. ^j Which was the reason
also, that in victory they were employed in giuing chase to the enemy, that had lost the
field. The armed used to follow in good order of battell, the slaughter, and execution
was deliuered to the light armed, and horse. Wherein notwithstanding the counsell of
Iphicrates was held good; take heede (said hee, to his light-armed) of ambushes,
and spare not to presse hard vpon the reare of those, that flie, till you come to
rivers, or straights, or ditches. For it is dangerous in such places to hinder the e-
nemies flights, least feare turne into desperation.

a Arrian. lib. 1.
7. D.
b Arrian. lib. 2.
3. E.
c Arrian. lib. 2.
d Arrian. lib. 1.
j. j.
e Arrian. lib. 3.
64. E.
f Arrian. lib. 4.
65. D.
g Polyen. lib. 3.
in Iphicrate
99.
h Xenoph. de
exped. Cyr.
lib. 1. 205. B.
i lib. 7. 410. A. B.

The fashion of Horse-battailes: and first of the Rhombes,
the Wedge, and the Square.

CHAP. XVIII.

Those, that haue written before mee, haue diuersely framed *Horse-battailes*,
some of iust squares, some longer in flanke, then in front, some like a *Rhomb*,
some like a *Wedge*, but none of them haue (if I may speake freely) expressed fully
their owne conceits. Therefore to make all things cleere, and better to bee vn-
derstood, I will set downe the seuerall figures of each seuerall kinde.

¹ It seemeth the *Thessalians* whose power was great in Horse, were the first, that
vied the kinde of battaile ² fashioned in forme of a *Rhomb* (the inuention where-
of is attributed to *Ision*) as fittest for all encounters; The *Horsemen* thus ordered
being ready to turne their faces euery way with speede, and not easie to bee sur-
prised in flanke, or in the Reare. Because the best men stand in the flanke, and the
Commanders in the Angles, as namely the Captaine of the troupe in the front,
and in the right, and left Angles those, that are called Flanke-commanders, and
the Lieutenant in the Reare-angle.

³ The *Scythians*, and *Thracians* haue vsed *Wedges*, and likewise the *Maccedonians*
by the ordinance of King *Philip*. For this kinde of battaile was held of more ex-
act vse, then the *Square*, because the Commanders are placed in a circle; and con-
sisting of a narrow front; it maketh readie passage thorough any distance, and an
easier wheeling and returning to the first posture; as hauing no such troublesome
windings about, as hath the *Square*.

⁴ The *Persians*, and *Sicilians*, and most *Gracians* made choice of *Squares*, being
of opinion they were more easie to frame, and fitter for ioint-mouing of the
Horse, and more effectually in vse. For they are sooner in order being digested
into

into files, and ranks, and in this order alone all the Commanders fall vpon, and charge the enemy with one maine force. Those are best *Squares*, that double the number of the length to the number of the depth. As when there are eight in length, and foure in depth, or tenne in length, and siue in depth. These in number are of vnequall sides, but in figure foure *Square*. For the length of a Horse from head to taile compared with his breadth requirerth more men in rank, then in file [to make vp the *Square*] Some allow thrice as many in length, as in depth, and thinke by that meanes a perfect *square* may be formed: because for the most part, the length of a Horse seemeth thrice as much, as the breadth betwix his shoulders. Therefore they giue nine in front, and three in flank. For a multitude of Horsemen yeeld not the same aduantage behinde, that foote doe, when in the depth of the Battaille they iointly thrust on; in as much as the Horse helpe nothing to the settlednesse of fast resistance, being neither able to thrust those forwards, that are before, nor yet to linke, and knitte with them, and so to make one weight, as it were, of the whole body; and in case they presse vpon the formost, by disordering, and distemping their owne Horse, they annoy themselves more, then the enemy. Therefore it alwaies falleth out, that when there are as many Horse in length, as in depth, a *Square* of number is made, but the sides of the figure are vnequall, the depth exceeding the length in proportion: but when the figure of the Troupe is *Square*, the number of the sides and front, is vnequall.

Notes.

In the second Chapter of this booke, the armie was diuided into two kinds, footemen, and Riders. Footemen againe into three, armed, Targetiers, and light armed. Of these three is hitherto treated. Riders follow, who either used Horses, or Elephants. Horses either alone, or else in Chariots. Of these I treateth generally hereafter. For the arming, and place of Horse in the fild, see hath sufficiently spoken already. The following discourse is: First, of the manner of embattailing horse (wherein he setteth downe the diuersity of vjage in ancient time.) Then of Chariots, and lastly of Elephants. * That a horse is a kinde of beast, that loues man, and is most faithfull vnto him Pliny testifieth. The vse of him is for carriage, and for seruice in the field. And in the seruice of the field an armie without horse, is in a manner no armie. Iphicrates (as I haue said before) comparing an armie to a mans body resembleth the horse to feete. And as the body hath no power of moving, or rather remaining, the feete being lame, or taken away, so is the armie slow, and vnfit for expedition, that is destitute of horse; and may be well resembled to those beasts, that creepe vpon their bellies, whose greatest hast is with little speede. The horse do great seruice in the field of themselves alone, and are principally employed in matters that require quicknesse in dispatch. Therefore are they fit for discoueries, either of the enemies country, or of his campe, or of his marche, or of other things, whereof the Generall desires to haue notice. And not for discoueries alone, but to spoile, and destroy, whatsoever the enemy hath growing, to make prey of his Cattle, burne his houses, kill his people, surpris his places of strength, and to vnburke him from doing the like to vs; to bring and conuay prouision for our Campe, to (bat in the enemy, that hee get not out his campe for the causes, to hinder the enemies march by falling on the reare. Briefely all expeditions of celeritie are for the most part deliuered to the horse alone. Especially as long as they are in such places, as give them liberty to go on, or retire at their pleasures. Yet are they often ioynd with the light armed, as I haue shewed. They often iointe

likewise

likewise with the armed. * And if they may come to charge the enemies battaille in the flanke, or reare, at such time, as our armed charge in front, they endanger all. But for employment alone against the armed foote many examples of former times shew, how weakethere force is. b And how little they preuaile (especially against armed, that are practiced in fight, and resolute Souldiers) The examples I haue quoted in the margin make the matter cleare. For further confirmation I will set downe Xenophons opinion, which all be it, it was deliuered concerning the Persian horse, that came against the armed foote of the Grecians in their returne out of Persia, that came against the armed foote in general. His words sound thus: c If any of you faint in minde (saie he to the Grecians) because we haue none, the enemy many horse, let him consider, that ten thousand horse-men are no more, then ten thousand men. For no man was euer flaine in battaille by bying, or stroke of a horse: Men they are, that performe whatsoever is done in fight. As for vs (the foote he meaneth) our mounting is much more firme, and steadfast then theirs. They hang vpon their horse, and are in feare not onely of vs, but to be shaken of and throwne to ground. We contrariwise haue stable footing, and shall be able both with great assurednesse to strik, and direct our aime with more certainty. One aduantage the horse-men haue, they may more securely runne away. Hübner Xenophon. And so much is summarily spoken of the seruice of horse.

¹ The Thessalians, whose power was great in horse | The Thessalians inhabiting about the mountain Pelus were the first, that fought on horse-backe, and were therefore called Centaures. When they watered their horses in the river Peneus, the horse-headed people, who were the most skilfull multitude, who saw the bodies of men ioynted to the shoulders of the horse, conceived, that the upper part was man, and the neither Ox. For it should seeme, horse were not so well knowne then, as Oxen, with which they laboured and plowed their land. The Poets therefore fained, that they were monsters compounded of two diuers natures, man and ox, or bull; and that Centaurus, the beginner of the race was begotten by Ixion vpon a cloude, which was figured like Iuno. Homer testifieth Seruius giueh a better original of the name, saying, that certaine seruants of a Thessalian King seeing their masters Neate, raging with the Brimse (a flie that biteth cattell) got a horse backe, and pricking them with goades, reduced them to their stables, and that they were after called Centaures, Para kentein tou tauros, of pricking the neate. The great Etymologicon giueh yet another beginning of the name. For where I haue said that Centaurus was begotten by Ixion vpon a cloude, which was figured like Iuno, with whom Ixion was in loue: The Etymologicon saith, the sonne of Ixion, and of the cloude was called Centaurus: Apo tou ton patera autou kentein ten auron. But d Diodorus Sicul. reporting the historie of the Centaures, speaketh not of Centaurus, the father of his race but saith notwithstanding, that they were bred of a cloude, and that the Nymphs brought them vp, and that they were the first horsemen, and therefore called Hippocentauri which gaue occasion to the fable, that they had two natures. It is generally agreed, that these Centaures were Thessalians, and that they were the first horsemen, that are mentioned in any history. And as they were the first, so by reason of their long practise * they were accounted the best, the most valiant, and the most expert horse-men of all Greece, euen to the time of Philip, sonne of Aminas King of Macedonia, who conquered all Thessaly (Justin) not of desire to make himselfe rich of the prey of that Countrey, but to winne to his armie the strength of the Thessalian horsemen. Whose seruice he vied afterwarde in all his war. Neither did they lesse seruice to his sonne & Alexander, in whose greatest battailes their vertue clearely appeareth, and is especially commended by histories. f Pyrrhus,

The Batticks

thus also, principally by their valor, put the Romans to flight. * Agellius returning out of Asia towards his Country led his armie through Theſſalie, and bring much incumbrance in his march by the Theſſalian horſemen, that were his enemies, hee charged them and overthrowethem, and pleased himſelfe marvellouſly therein, becauſe with troups of horſe, which himſelfe had raised, and diſciplined, hee had overthrowne the Theſſalians, that were (ſaith Xenophon) ſo highly renowned for horſemanſhip.

b Euclid. lib.
1. deſinit. 34.

2 Fafhioned and forme of a Rhombe] There are three kindes of horſe battailes mentioned by Aelian, the Rhombe, the Wedge, and the Square. And the ſquare is either a ſquare, or longer in ſlanke then in front, or in front then in ſlanke. The Rhombe was the inuention of the Theſſalians, and in that forme they vſually fought. But where he maketh laſon to be the inuention of it, he afterward expoundeth his owne meaning, attributing the inuention to Ileon the Theſſalian (from whom alſo it was tearmed Ile) but the chiefe praictiſe to Iaſon. Euclide deſineth a Rhombe in this ſort: * A Rhombe is a ſquare figure, that hath the ſides equall, but the angles not right. That is, the ſoure ſides of the ſquare are of one, and the ſame length, but the points, which make the angles, are two of them ſtretched out in greater length, and become more ſharpe, two of them brought narrower together, and made more blunt, then the right angles of a Tetragonall ſquare. See the figure. It is the ſame figure in a battaile, that at this day we call the Diamond battaile, which is ſometimes praictiſed amongſt the ſoote for ſhew, and a cereſe ſake, but amongſt the horſe I haue not ſcene it praictiſed. And aske you goeth to charge with all the ſouldiers, that ſtand in one of the ſides, that is with the front, (for the front is but a ſide of the ſquare) ſo the Rhombe chargeth with one of the points, which is the front of the Rhombe. Whether of them is of moſt uſe in the field, I cannot to determine. For the ſquare ſtandeth the praictiſe of our daies, beſides the uſage of the Perſians, Sicilians, and moſt Græcians, as Aelian ſaith. For the Rhombe the Theſſalians alone (which notwithſtanding were acknowledged the beſt horſemen of Greece) vſed, ſe we allow the Wedge for a ſparcell of the Rhombe, (a Rhombe being but a double Wedge, as making two wedges, when it is diuided in two) and then haue wee for the Rhombe not onely the Scythians, and Thracians (both nations very good horſemen) but King Philip Amintas ſonne, and Alexander the great, and his ſucceſſours. Either of both formes haue their reaſons. For the ſquares they, that vſe them, held opinion (as Aelian ſaith) that they were eaſier to frame, and ſitter for ioint mouing of horſe, and ſooner in order of file, and ranke, and that the Commanders iointly charged the enemy, which in no other forme could be done. For the eaſineſſe to frame I ſee no great difference, onely cuſtome, and vſe, muſt in every forme, yea in the ſquares themſelues make the horſemen ready to know, and take, and keepe his place. The ſame may be ſaid for the ioint mouing of the horſe. Now to file and rancke is common to the ſquare with ſome Rhombes, and as ſonne done in the one, as in the other, the number of the troupe being vnder knowne, and every horſeman hauing his place aſſigned, and the forme reſolued vpon, into the which it muſt be caſt. For where there are 4 kindes of Rhombes, one, that fileth, and rancketh; another, that fileth, but rancketh not; the third, that rancketh, but fileth not; the laſt that neither fileth, nor rancketh (as Aelian teacheth in the next Chapter) The firſt will finde no more difficultie, of ſiting, and rancking, then the ſquare, the two next allicit the one ranke not, the other file not, yet the want of ſiting, or rancking hindereth no more the readineſſe of ſitting them, then the vſe of ſiting, and rancking helpeth the other. The fourth is rather curious then profitable, as I take, neither doe I finde example of it. And it may be truly affirmed of it, that the ſquare is much eaſier to be faſhioned. We ſhall haue occaſion to ſpeake of the laſt three in due place. Touching the ioint falling on of the Commanders, I confeſſe the advantage is great. For when the beſt men (ſuch as the Commanders ought

of Aelian.

to be) altogether fall vpon the enemy, they are very like to put hard to them. And as it is a great part of ſkill to bring many hands to fight, ſo is it no leſſe, to bring the beſt hands to fight. Many hands make light worke, the beſt hands ſore worke. Now for the Rhombe Aelian alledgeth theſe reaſons. Firſt, that it is fitteſt for all encounters, becauſe the horſemen are ready to turne their faces the beſt men to their ſlanks, and the Commanders in every point of the Rhombe. And for the Rhombe, which way ſooner faces are turned, remaineth in the firſt forme. And whether it be to the right, or left ſlanke, or to the rear, it keepeth ſtill a even ſides, and the men of moſt ſervice in the ſides. Beſides that one point alwaies affronteth the enemy. Not unlike a Caltrop, which howſoeuer you caſt it to the ground, hath one point bearing right vp to wound the horſes feet: But the ſquare in turning faces to either ſlanke altereth the forme of the front. In a broad ſquare, the front at the firſt was longer than the ſides, faces being turned to either ſlanke the ſides become longer, than the front; contrariwiſe in the Herſe battaile. Beſides in ſuch turning of faces the ſquare leſeth the advantage of embattailing the Commanders, that ſtood in the front, ſtanding now in one of the ſlanks, and being not able to charge the enemy iointly, (the greateſt advantage of that forme) and ſo the front being without Commanders, is ſubiect and in danger of ſurpriſe, where the Rhombe, which way ſooner faces turne, hath as many Commanders in the front, as at firſt. But let vs take the horſe ſquare in full ſtrength with all Commanders in front, whether ſhall that forme be better, than the Rhombe? I dare not affirme it. For where there are two kindes of fight; One with maine force, the other with ſleight, and Art; in the firſt I will preferre the ſquare, in the laſt the Rhombe. The ſquare for ſlaughter and violent overthrowing, the Rhombe for piercing, and artificiall breaking the enemies battaile, which laſt amongſt great Commanders: hath alwaies beene accounted the beſt kinde of winning. In the ſquare all the Commanders fall iointly vpon the enemy, and becauſe they are ſuppoſed to be the chiefe of the Army, in all likelyhood they will overthrow the formoſt, and ſlay many. Yet by reaſon of the length of their front, ſhall ſicke man to man, and can make no farre entrance, and the victorie hangeth doubtful, till they haue ſlaine the moſt of them, that reſiſt, and ſo make the reſt to ſlie. The Rhombe contrariwiſe, being narrow and pointed in the front, firſt forcuth a paſſage with the point, which maketh way to the reſt that follow, and then without great labour piercing further and further, breaketh the aduerſe battaile, & diſperſeth, and putteth them to flight, and after doth execution at pleaſure. Neither can I make a ſitter reſemblance, then by comparing the 2 figures, one to an axe, the other to a wedge, both inſtruments vſed for diuiding ſolid maſſes of wood. For the axe, albeit ſharper, than the wedge, yet being the edge drawn out in length, can not by any ſtrength be driuen ſure into the wood, but by doubling many ſtroaks, and by much labour cometh as laſt to diuide it. The wedge contrariwiſe, though not ſo ſharpe, being once entered, inſinuateth it ſelfe more by liſe, and little with the narrownes of the point, and maintayning the hold it firſt got, at laſt forceth it aſunder, though it be neuer ſo tough. So is it in the ſquare, and Rhombe: whereof the ſquare begetteth, and endeth with violence, the other vſeth firſt cunning, and middeas, as it were, to enter: being once entered reuolteb a peeces, and diſparteth all that ſtandeth in the way. The manner of our times aloweth not of Rhombes; Experience of former times highly prized them. I will inſiſt vpon the Theſſalians alone, who are accounted the inuention of the Rhombe, & fought alwaies Rhombe-wiſe. Polybius had ſene their ſervice, and beene General of the Horſe in his owne country, and therefore able to iudge. He giueth this cenſure of them; * that in troups, and being in battaile

led, they could not be resisted: to fight man to man in single combat, they had neither will, nor courage. *What then should be the reason, they should be so powerful in troops?* No other, than the *forme* of their *mbattailing*, which *forme* was the Rhombe here mentioned by *Eliau*. In this *forme* they commonly beat the Græcians, and Persian squares, and got the reputation of the best horsemen of Europe.

3 The Scythians and Thracians used the wedge] The Rhombe is of 4 sides, the wedge but of three: and half a Rhombe maketh a wedge, as will be shewed in the next chapter. The wedge was used by the Scythians, and Thracians, and whether King Philip of Macedonia borrowed it of them, I am uncertain. But I rather incline to think, that his Theban Master taught him as well the wedge, as other formes of battales. The cause of my conjecture is, for that I finde that his fellow scholar Epaminondas beat the Lacedæmonian horse at Mantinea in that forme. ^b Xenophon recounteth the storie to this effect: The enemy (they were the Lacedæmonians) ordered their horse like a Phalange of armed in depth, without mingling foote with them: But Epaminondas made a strong wedge of horse also (for before he tells the Theban armed were cast into a wedge) and ioyned some foote with them, concealing after he had cut in peeces the horse, he should not misse of ouercomming the other forces of the enemy. And so going to charge he was not deceived of his hope. Thus Xenophon. Of ioyning horse and light armed together, I have spoken before: And that they were light armed, that Epaminondas ioyned to his horse, ^d Diodorus Siculus sheweth. By Xenophon then it is plaine, that not only the Scythians, and Thracians, but the Græcians also, when they thought it convenient, used the horse-wedge, and that Epaminondas ordered both foote, and horse in a wedge. And considering King Philip was brought up in Epaminondas his Fathers house, and made partaker of the learning wherewith Epaminondas was instructed; it is like in erecting a new military discipline amongst the Macedonians, as he tooke many other things from the Græcians, so he borrowed this forme, having first seen the notable effect thereof at Mantinea.

Now *Eliau* bringeth reasons, why the wedge was holden better than the square. Let me with leave adde a word or two why I take it to be better than the Rhombe. And first it cannot be denied, that the wedge having the same manner of disposition that the Rhombe hath, that is a front ending in a point, where the Captaine standeth; two points of the two flanks, where the flank-commander stands, the Lieutenant in the reare, and the best men in the flanks, but it must be as powerfull to open the enemies battale, as the Rhombe is. Then it hath this advantage of the Rhombe that it bringeth more hands to fight. For let the Rhombe and wedge be framed of an equal number, the wedge in figure resembling the forepart of the Rhombe must have the horse that should be ranged in the reare of the Rhombe, orderly couched within the 2 sides thereof: where by both the number of the horse in the sides is increased, and the bulke of the body betwixt flank and flank enlarged. And seeing both the Rhombe and the wedge goe to the charge with the point of their front, the wedge both hath the property to pierce, and enter the enemies battale by art and sleight, as well as the Rhombe, and doth it with more strength, because of the great number of hands in the sides, which all come to fight. Toyn, that the hinder part of the Rhombe serveth only to avoid surprizes, and worketh nothing in charging. For after the two flank points are entred, the rest of the Rhombe growing narrower, and narrower toward the Reare, fallth further off from the enemy, and is content only to follow the way, that was made to hand by the front and flanks; without being able to strike a stroke; especially if it preferre the order it ought to keepe: whereas all parts of the wedge are effectual, the point to enter, the sides even to the flank corners,

where

where the Reare endeth, to dispart and disperse; and finally to disorder the enemy, whereby the victory ensueth. And if we may rely upon authority, the authority of King Philip will sway much for the wedge. For unless he had held it better than the Rhombe, hee would not have chosen, nor accustomed his Macedonians to it, nor Alexander after received it, if he had not bene of the same opinion. Neither did the event accesse them: for almost in all battales their horse thus disposed carried away the victory. But, as I before noted, neither Rhombe, nor wedge have found grace in the eyes of the great Generalls of our daies, nor can we tell what to insitt upon, till experience hath taught, how well these formes will agree with the weapons, and service of our moderne wars.

4 The Persians made choice of squares] The square is the third, and last forme of horse-battale that *Eliau* mentioneth; wherof there are three kinds, one with a larger front, then flank; another with a larger flank then front; the third, with front, and flank equal. All these three were used amongst the Persians, and Græcians. For two of the first, Xenophon may witness. When Ageilaus, after Tissaphernes (the King of Persia's Lieutenant in part of the lesser Asia) had broken truce with him, made an incursion into Phrigia, ^h Xenophon telleth, that the rest of his journey was without impediment, till he came not farre from *Dasyllium*. There when his horsemen galloped to a hill to discover the country, by chance the horsemen of *Pharnabazus* (another of the King of Persians Lieutenants) being about the same number that the Græcians were, and sent by *Pharnabazus* under the command of *Ratynes*, and *Bancaus* his bastard brother, galloped up the same hill, and discovering one the other no further off, than two parts of a furlong, at the first they stood still; the Græcians ordered Phalange-wise 4 in depth, the Barbarians making their front 12 in length, the depth many more. Afterward the Barbarians began first to charge. when they came to hands, all the Græcians that ioyned, broke their stances. The Persians having *Corneil* darts killed some 12 horsemen, and 2 horses. Hereupon the Græcians fled. But when *Ageilaus* came with the Armie to the rescue, the Barbarians againe forsooke the field. The Persians then used a square longer in flank, then front: The Grecian a square longer in front, then flank. But which of the three squares is most to be esteemed *Eliau* sheweth in the words following, saying these squares are best, that

5 Double the number of the length, to the number of the depth] What the length, and depth in a battale are, we have seene before. To see under stand *Eliau* the better, let us repeat, that the length of a battale is the extension of the front; the depth the extension of the flank. To double then the number of the length to the number of the depth, is to place twice so many men in front, as in flank. As for the purpose, 6 in front, 3 in flank; or 8 in front, 4 in flank; or 10 in front, 5 in flank. And that this was the manner of the Lacedæmonians appeareth by the *Oulamos*, or horse-troope, instituted by *Lycurgus*, which was figured Tetragonally with a equal sides, and contained in it 50 horse. Now that it could not be a square of number, that is, to have as many horse in flank, as in front may hereby be shewed, because no square number will make 50. The nearest is 7 times 7, which amounts to 49. But proportioning the number of the length double to the number of the depth, that is 10 in front, and 5 in flank, even 50 will arise. So that the horse troope of the Lacedæmonians had the number of the length double to the number of the depth, and made a square in the equality of measure of the sides, not in number, which is the Tetragonall figure, wherof *Plutarch* speaks. And where Xenophon (as I have alledged before) reporteth that the horsemen of *Ageilaus* were but 4 in depth, it hindereth not this truth. For, as I noted before, the ordinary array of the Lacedæmonians foote was 8 in depth. Yet did *Pausanias* the Lacedæmonian

King

b Diodor. Sic.
lib. 16. c. 11.
c Xenoph. Hist.
Græc. lib. 7.
c. 46 B.

d Dio I. Sicul.
lib 15 pag 102

h Xenoph. Hist.
græc lib. 3.
c. 49. D.

i Plutarchin
Lycurgo.

The Tactics

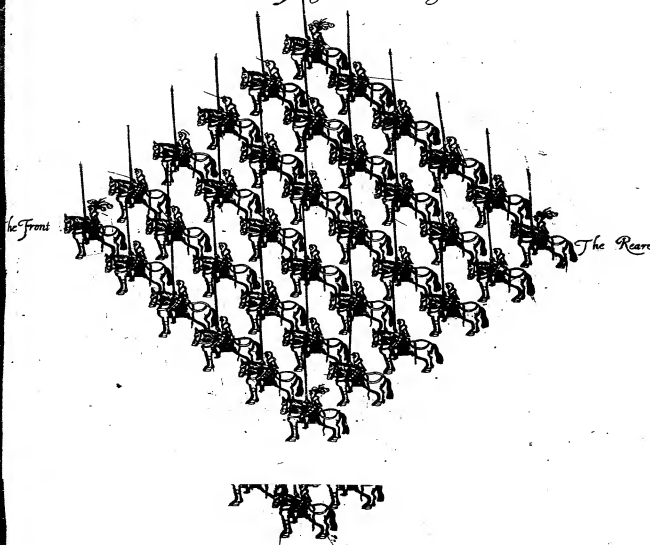
King cast his men into a deepe Phalange against Thraſibulus. Other examples I haue al-
 ledged in the ſame place touching the ſame matter. Beſides this appeareth to be but a cu-
 mulous fight either of the parties comming ſuddenly in the ſight of the other, and
 going preſently to charge, before they could haue time to alter the order they then were in.
 And ſo ſay the horſe troupe of the Lacedemonians ought to haue bene but 4 in depth,
 it muſt thereof neceſſarily follow that they were 12 in length, which yet will com: horſe of
 50: 4 times 12 makes but 48. Indeed ² Leo holdeth opinion, that in a horſe battaile, the
 depth ought to be no more than 4. I will ſet downe his words as neare, as conveniently I
 can enliſt them. The depth, ſaith he, or thickneſſe, as it was of ancient time limi-
 ted, is ſufficient, if it be of 4 horſe in euery troupe; becauſe in horſe a greater
 depth will be idle, and to no purpoſe. For they cannot, as foote doe with their
 thickneſſe, thruſt one another forward from behind; and ſo the formoſt, will they,
 or nill they, are forced to goe againſt the enemy. And this is done amongſt foote.
 But the horſe can not thruſt forward thoſe, that are before them, nor the file-leaders
 that ſtand in front, be ſeconded in that kinde by the reſt, that ſtand in depth after
 the fourth man. For if they be *Lancers*, the fiſt ranke cannot reach with their
 launces to the front. If *Archers*, they ſhall be faine to ſhoot aloſt for feare of
 hurting their companions before; and ſo their arrowes ſerue for no vſe, after fight
 is ioyned. Therefore is the number of 4 ſufficient in depth, as I haue ſaid. This was
 the opinion of Leo. To which I cannot abſolutely aſſent; vniſſe he had giuen 8 for the
 front of his troupe, and ſo made it of 4 equall ſides in figure not in number, as *Ælian*
 requirith to be done in the beſt ſquares. For the reaſon of launces not reaching to the
 front in the fiſt ranke, reacheth not home to the reaſon of warre. *Ælian* before hath de-
 clared, that the pikes of the ſeuenth ranke reach not to the front of the Phalange. Yet
 no man will thereof inferre, that the Phalange ought to be but 6 deepe. Tea but the foote
 that come after, helpe the formoſt, ſecunding them, and thruſting them on with the weight
 of their bodies, which the horſe can not doe. This muſt be granted to be an advantage, that
 foote haue aboue horſe in depth. Yet are there other reaſons alſo of giuing depth to a Phal-
 ange: In the order whereof two conſiderations concur; one of offence, the other of de-
 fence. The reaching of pikes or horſemen ſlaues ouer the front is good for offence, that is
 to annoy the enemy in the flanke: likewise the thruſting on of thoſe that come behind, ſer-
 ueth with the violence to make them giue ground. A reaſonable depth is for defence, in as
 much as it defendeth a Phalange againſt the induerſe of the enemy to breake it a ſunder.
 And as it is a fault to make it too deepe, ſo is it likewise a fault to make it too ſhalow. Too
 much depth narroweth the front, and giueth eaſie meanes to the enemy to incompaſſe, and
 ouer-front it. ¹ Too much ſhalowneſſe on the contrary ſide maketh it weak, and ready to
 be broken, and diſſeuered by the enemy, and giueth a paſſage thorough, and meanes not
 onely to incompaſſe the front, but at the ſame inſtant alſo to aſſault it behind, and ſo utterly
 to deſeat it. So that the reaſons of Leo reach not home, as I ſaid, there being other cauſes
 of thickning a horſe troupe beſides reaching of launces to the front, and ioint thruſ-
 ting on of the horſe comming behinde. And where Leo ſpeaketh but of 4 horſe in
 depth of a troupe, Polybius ſaith plainly that being ordered for fight, they had for the
 moſt part 8 in depth; Polybius a man which liued in the times, whereof Leo ſpeaketh,
 and had bene General of the horſe of the Achæans. Beſides Leo ſeemeth but a little to
 differ from himſelfe. For in his ſeuenth Chapter, he writeth after this manner: If
 there be many horſe (that is about twelue thouſand) let the depth be of 10. If
 but few, let it be no more than 5. In ſquares therefore I hold *Ælians* proportion beſt,
 to double the number of the front, to the number of the flanke; and as the number of the
 troupe ariſeth (for horſe troups are not alwaies of one number) to enlarge the length of
 the

² Leo cap. 12.
 § 40.

¹ Leo cap. 14.
 § 108. 109.

³ Leo cap. 7.
 § 81. & cap. 14.
 § 70.

Cap. 13
 A Rhombe ſileng but not ranking



³ The halfe Rhombe is called a wedge being fashioned three ſquare; ſo that the
 forme thereof appeareth in the Rhombe.

Other haue formed the Rhombe ſo, that the 4 Horſemen embattailed in that
 forme, nei-her file, nor ranke, conceiuing that turnings and other motions will be
 more eaſily performed in this figure, nothing hindering before, behind, or in
 flanke. And fiſt they place the Leader; then one at his right, and another at his
 left hand, ſo diſtant, that their Horſes heads reach vp to his Horſes ſhoulders, as

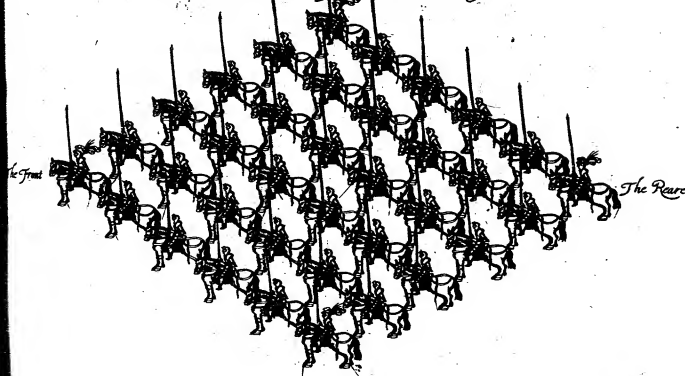
1 Leo cap. 14.
5. 102. 109.

Leo cap. 7.
581. & cap. 14.
970.

...neyn narroweth the front, and giueth easie meanes to the enemy to incompasse, and
ouer-front it. ¹ Too much shallownesse on the contrary side maketh it weake, and ready to
be broken, and disordered by the enemy, and giueth a passage thorough, and meanes not
onely to incompasse the front, but at the same instant also to assault it behind, and so utterly
to defeat it. So that the reasons of Leo reach not home, as I said, there being other causes
of thickning a horse troupe besides reaching of Launces to the front, and joint thrusting
on of the horse coming behind. And where Leo speaketh but of a horse in
depth of a troupe, Polybius saith plainly that being ordered for fight, they had for the
most part 8 in depth; Polybius a man which liued in the times, whereof Leo speaketh,
and had bene General of the horse of the Achæans. Besides Leo seemeth not a little to
differ from himselfe. For in his seventh Chapter, he writteth after this manner: If
there be many horse (that is aboue twelue thousand) let the depth be of 10. If
but few, let it be no more than 5. In squares therefore I hold Elians proportion best,
to double the number of the fronte, to the number of the flanke; and as the number of the
troupe ariseth (for horse troupes are not alwaies of one number) to enlarge the length of
the

A Rhomb

Cap. 19
A Rhombe neither *file* nor *Ranking*



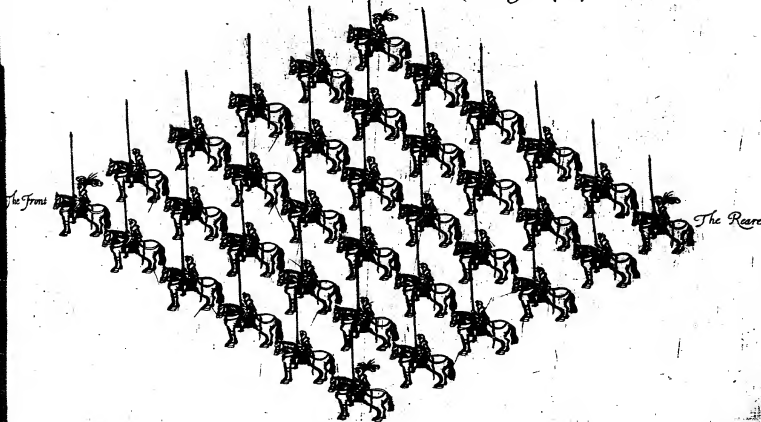
³ The halfe Rhombe is called a wedge being fashioned three square; so that the
forme thereof appeareth in the Rhombe.

Other haue formed the Rhombe so, that the 4 Horsemen embattailed in that
forme, nei-her *file*, nor *rank*, conceiuing that turnings and other motions will be
more easily performed in this figure, nothing hindring before, behind, or in
flanke. And first they place the *Leader*; then one at his right, and an other at his
left hand, so distant, that their Horses heads reach vp to his Horses shoulders, as

most part 8 in depth; Polybius a man which lived in the times, wherof Leo speaketh, and had bene Generall of the horse of the Achazans. Besides Leo seemeth not a little to differ from himselfe. For in his seventh Chapter, he writeth after this manner: If there be many horse (that is about twelue thousand) let the depth be of 10. If but few, let it be no more than 5. In squares therefore I hold Elians proportion best, to double the number of the front, to the number of the flanke; and as the number of the troupe ariseth (for horse troupes are not alwaies of one number) to enlarge the length of
the

Leo cap. 7.
581. & cap. 14.
570.

Cap. 19.
A Rhomb Ranking but not Filing.



They that would haue a Rhomb Ranking must be placed in the middlemost of an vneuen number, as of 11, or 13, or 15. To which they ioine other ranks before, and behind, euery one conteyning two lesse than the former; as if the greatest rank consist of 15, the next ranks on either side are to haue but 13, the next on either side of these 11. and so euery one two lesse, till at last you come to 1. And the whole Troope is to consist of 113 horse.

³ The halfe Rhombe is called a wedge being fashioned three square; so that the forme thereof appeareth in the Rhombe.

Other haue formed the Rhombe so, that the 4 Horsemen embatrailled in that forme, neiher file, nor rank, conceiuing that turnings and other motions will be more easily performed in this figure, nothing hindring before, behind, or in flanke. And first they place the Leader; then one at his right, and another at his left hand, so distant, that their Horses heads reach vp to his Horses shoulders, as

the front, and the depth of the flanke proportionably one to an other.

6 When there are as many horse in length as in depth I noted before in the ninth Chapter, that there were two squares of equall sides, the one of number, the other of figure, which two squares differ in this, that the one maketh unequal sides in the shape of the battaile, the other equall. The first at this day, we call a square of men, the other a square of ground. When the number of the sides is equall in length, and depth, it giueth but halfe so much ground in front, as in flanke. Each souldier, if it be a foote-battaile, occupying a foote, and a halfe of ground in front, when he goeth to charge, where in flanke he must haue 3 foote. And in a horse troupe 3 foote in front, and double, or (as some say) treble as much in flanke. And so are the sides unequal. The euen length of flanke and front giueth a like ground to both, and maketh the sides of the figure equall, but the number of the front double to the number of the flanke, whether it be in horse or foote. In foote, because the souldiers in ranke haue but halfe so much distance, as they haue in file; in ranke a foote and a halfe, in file three foote. In horse, because the length of the horse is much more, than his breadth, and that length is fully stretched out in flanke, the breadth onely in front.

Why Rhombes were first brought into use, and the diuers formes of them.

CHAP. XIX.

THE forme of the Rhombe seemeth to haue beene taken vp for the necessarise thereof. For the Capitaine possessing the first place, the next following horsemen are not to ranke with him, but to come a litle after on both sides; so that the heads of their horses may reach to his horse shoulders, & on the right, & left hand, and behind, they ought to keepe good distances that too much thronging and clustering together, breed not disorder, whilest some horses being by nature sullen fall a stinging oftentimes, and foule with other; and considering the beast is somewhat long of body, that in turning about he wound not the horsemen, that are in fight, whilest with his heeles he ay meth at the Horses next vnto him.

They that fashion Horse into Rhombes, so fashion them, that some Rhombes file, and ranke; some neither file, nor ranke; other some file, but ranke not; other ranke, but file not: euery particular whereof standeth thus.

They that would haue a Rhombe both file and ranke make the greatest ranke being the middlemost of an vneuen number, as of 11, or 13, or 15. To which they ioine other ranks before, and behind, euery one conteyning two lesse than the former; as if the greatest ranke consist of 15, the next ranks on either side are to haue but 13, the next on either side of these 11. and so euery one two lesse, till at last you come to 1. And the whole Troupe is to consist of 113 horse.

The halfe Rhombe is called a wedge being fashioned three square; so that the forme thereof appeareth in the Rhombe.

Other haue formed the Rhombe so, that the 4 Horsemen embattailed in that forme, neither file, nor ranke, conceiuing that turnings and other motions will be more easily performed in this figure, nothing hindring before, behind, or in flanke. And first they place the Leader; then one at his right, and another at his left hand, so distant, that their Horses heads reach vp to his horses shoulders, as

most part 8 in depth; Polybius a man which liued in the times, whereof Leo speaketh, and had beene Generall of the horse of the Achæans. Besides Leo seemeth not a litle to differ from himselfe. For in his seventh Chapter, he writeth after this manner: If there be many horse (that is about twelue thousand) let the depth be of 10. If but few, let it be no more than 5. In squares therefore I hold Ælians proportion best, to double the number of the front, to the number of the flanke; and as the number of the troupe ariseth (for horse troupes are not alwaies of one number) to enlarge the length of the

is said before. And the first row they make of an vneuen number (as 11). The Leader of the Troope standing in the midst, and 5 other being laid to him backwardly on either side; so that this *Rank* containeth two sides of the *Rhombus*. Then the *reare-Commander* is placed directly behind the *Leader*, and to him are other ioyned forwardly on either side, and the number of euery following rank after the first, is to be two less than the former, and therefore 4 must be added on either side to the *reare-Commander*, and the number of the second ranke be 9. This rank maketh two sides *Parallel* to the two former sides of the *Rhombus*. The third must be 7, and so forward to one. The whole Troope hath in it 35 Horse. *Polybius* expreth the forme by the Greeke letter Δ . and maketh it to consist of 64 men.

Other *Rhombes* there are which *file*, but *ranke* not, and are fashioned thus: They make a file of any number, the *Captaine* being *File-leader*, and the *Reare-Commander* the last of the file. To both the flanks of this file, they lay two other files, either of them one lesse in number, than the first. These they begin to place, even with the midst of the distances of the first file on both sides, as if there were 10 in the first file, the next files on either side should haue 9 a peece, and the next after them 8 a peece, and still one lesse in all the rest aftercomming files, and so it will fall out, that the Horsemen shall *file*, but not *ranke*. This forme is profitable for turning off faces, when need is, from one point of the *Rhombus* to another. 7 Turning to the right hand is called turning to the staffe. Turning to the left hand is called turning to the *Raines*. But if a Troope be *to ranke*, and not to *file*, it must be ordered thus: The middle and greatest ranke is to be made of an vneuen number, and the rest of the ranks on both sides, laid even with the distances of this ranke, as was done in the *filings* troope. So shall you haue a Troope that *ranketh*, but *fileth* not.

Notes.

THE former Chapter had a generall diuision of Horse battailes into Rhombes, wedges, and squares; this comprehends the sundry figures of Rhombes, and the manner of framing them. Rhombes therefore are of 4 kinds, some *filings*, and *rankings*; some *filings*, not *rankings*; some *rankings*, not *filings*; some neither *filings*, nor *rankings*.

1 The heads of the horses reach to the heads of his [shoulders] *Eliau* saith, that in a Rhombus the *Captaine* standeth first, and the heads of the next horse reach to his horse [shoulders]. This rule, if it be taken generally, and meant of all Rhombes, will deceiue vs; if for two kinde of Rhombes alone, there is nothing more true. The Rhombus neither *filings*, nor *rankings*; and the Rhombus *filings*, not *rankings*, haue the followers horses heads advanced to the shoulders of them, that stand before. But the Rhombus *filings* and *rankings*, and the other *rankings* not *filings*, come wholly behind the horse of the *Captaine*, as the figure shewes, and will appear in the verbal description of the Rhombus.

2 A Rhombus both to *file* and *ranke*] To make a Rhombus both *file* and *ranke*, choicemust first be had of an vneuen number for the ranke the midst of the Troope, where the manner is to begin the Rhombus; which number must neither be too great, lest the Troope grow also too great, nor too little, lest there be in it no strength. *Eliau* giues a 11, 13, or 15 for that ranke, and wilth vs to begin the frame by placing first the middle ranke, to which the other ranks are to be ioyned on both sides, the middle men

again? the middle man of the first ranke in a right line of file, and the rest is like sort, euery Ranke still decreasing 2 men, till at last in the front, and reare-angle you come to one. The figure of this kinde of Rhombus I haue placed in the precedent Chapter; wherein the middle ranke is of 11, and the whole troupe of 61, and the horse heads of those that follow reach not to the former horses shoulders.


3 The halfe Rhombus is called a wedge] I haue spoken of wedges before, but noting of the framing of them. *Eliau* here sheweth how they are framed, when he saith, that the forme of them appeareth in the Rhombus, and that the haife Rhombus is a wedge. For as in a Rhombus *filings*, and *rankings*, you begin with placing the middle ranke first, and so proceed adding on both sides ranke to ranke, till you come to one man in the front: So must you proceede in a wedge, (saying that to the first, and greatest ranke) you ioyne the rest only on the one side, abating still in euery ranke 2 men, till you come to the point of the front, where the *Captaine* standeth alone. And this was the ordinarie horse troupe amongst the Macedonians, and is described in the next Chapter.

4 That the Horsemen neither *file* nor *ranke*] The second kinde of Rhombus specified here by *Eliau* is directly opposite to the first. The first both *filed*, and *ranked*, this neither *fileth*, nor *ranketh*; and is that kinde, which I noted in the last Chapter to haue more curiositie, than este. For the rest, what is more easie to frame, than they? In which either *files*, or *rankes* are laid together; or *files* alone, or *rankes* alone. And out of that ioyning both in the inward parts of the Rhombus, and the outward (that is the flanks) arise, and are without difficulty figured. In this you must first begin with the flanks, and make two front lines, or sides of the Rhombus; and after add as many to the *Reare*. And then when the 4 sides are framed, and haue their place, patch up by peece-meale thereof the body within. Wherein if there be not very large distances left betwixt horse, and horse, especially euery one being laid head to shoulder to another, it is not possible to conuey so many horses within the sours sides, as will make up the full Rhombus. And yet make it up as you will, the trouble is more, than in the rest of the Rhombes. And for the use, I see not how it can be greater, than in the rest, without power is alledged for turnings, and other motions. And the more I thinke upon it, the more I am induced to thinke, that it was the invention of some *Tacticke* master (of whom were great plenty amongst the Grecians) who seeing that some Rhombes *filed*, and *ranked* not; other *ranked*, but *filed* not; other both *ranked*, and *filed*, and that the two first were opposite the one against the other, would needs bring in a fourth, neither *filings*, nor *rankings*, to make an opposition betwixt against the third. But because this kinde also is specified by *Eliau*, let vs see how it is to be framed. *Eliau* for examples sake would haue the Troope to consist of 36 horse. To put these 36 horse in a forme, that shall neither *file* nor *ranke*, we are thus to worke. First, we must begin with the two front sides of the Rhombus, and make them of 11 horse, placing them thus: The *Leader* and *Captaine* in the point; next him backwardly on each side a horseman, his horse head reaching to the shoulders of the *Captaines* horse; then on the outward side of each of these a Horseman, and their horses heads must likewise reach to the shoulders of the next horses before. So must you go on, till you haue in like manner bestowed 2 a peece more on each side, still opening the two sides of the Rhombus proportionally. Thus done you haue

Then are we to fashion the two Reare sides of the two sides of the Rhombus which Rhombus of 9 horse, placing them after this will be in this forme. The *Lieutenant* in the Reare angle, directly opposite to, & yet looking toward the *Captaine*; on either side of him forward toward the front 2 Horsemen, their horses shoulders lying even with the head of the *Lieutenants* horse. And after them the other 6, 3 on one side, and 3 on the other in the same proportion. And so haue we the other two sides of the Rhombus in this forme, which being

The Tactics

ioyned to the former make the 4 sides of the Rhombe; in the framing whereof 20 of the 36 horse are bestowed. There remaine 16, which are thus to be ordered: Within the Rhombe we must at reasonable distance place a horseman behind the Captaine in aright line, and in the manner as before lay 3 to him on each side. The number will amount to 7, and this is the figure.

Then another horseman is to be set at the same distance directly before the Lieutenant, and on each side of him two other toward the front. And these 12 horse ioyned together will be 5 in all, and in this forme.  ther, will fashion out a lesser Rhombe, comprehended within the sides of the first. So are 22 horse disposed of. The 4 that are left are thus to be ordered. in a right line againe after the Captaine, and at the former distance is another horseman to be set: Then 2, one of the one side, & the other of the other side of him, their horses heads reaching to his horses shoulder: thus The horseman left must supply the voided place, standing directly before him, that stood next before the Lieuten.

And this is the true description of the Troope neither filing, nor ranking. I haue bene the longer in describing it, because the figure grauen is not fully to my minde, no horse head reaching to the shoulders of the horse, that standeth before him.

5 Polybius maketh it to consist of 64 men] Alian took the number of 36 horse to frame this Rhombe, Polybius requirith 64. The number is not materiall, so the forme be obserued. If you make it of 64, you are to take 15 horse for the 2 front sides, and 13 for the 2 reare sides, and so in euery ranke within to diminish 2, as you did in the former.

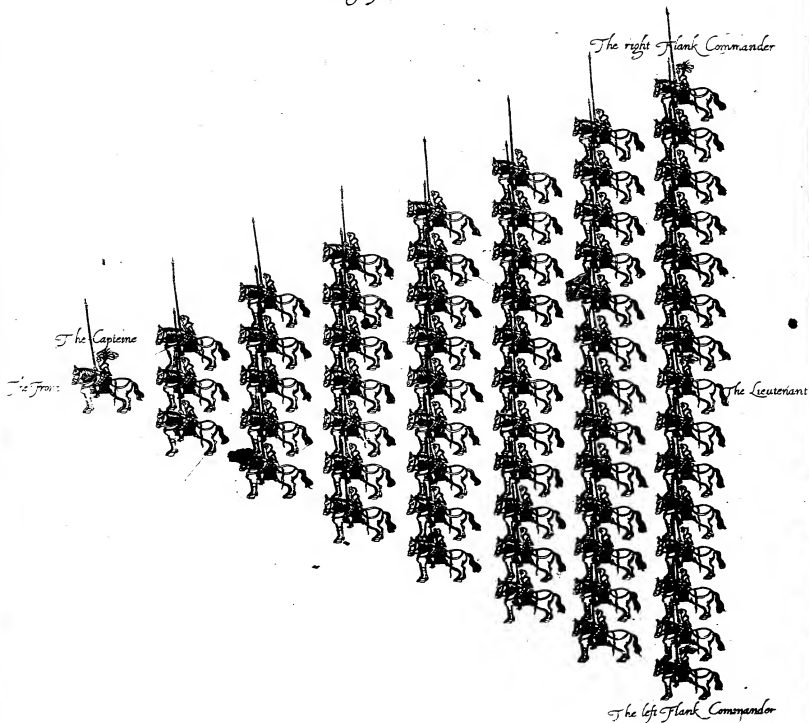
6 Which file, but ranke not] The third kinde of Rhombe fileth, but ranketh not. It is easie to frame. Take what number of horse you please, and make a file; then lay to the distances betwixt horse and horse of that file on each flanke two other files, each file conveying one lesse in number than the first. And the heads of the files are to be laid right against the space which is betwixt the Captaine, and his follower, and the rest of the horses against the other spaces successively. In all the paires of files, that follow, and are laid to the flanks, you must still diminish a horse a peece, till you come to the points, which haue but one either of them. And of this abatement of one in euery file, both front, and reare, and flanks grow into points, and make a Rhombe: As if the euen number in euery file, a square battaile would arise. See the figure. This was the forme the Thessalians sought in, as appeareth by Alian.

7 Turning to the right hand] The turnings of horsemen and footmen to the right, and left hand, are not termed by the same names. And the difference cometh of the diuersitie of weapons carried on the right, or left side. The horseman in his right hand hold his staffe, in the left the raines of his bridle. The armed foote in his right hand his pike, on the left shoulder his Target. Hence was it, that when the horseman was commanded "to turne to the right hand, they bid him turne to his staffe, the footman to his pike. When to the left hand, they bid the horseman turne to the Raines, the footman to the Target.

8 To ranke, and not to file] This is the last kinde of Rhombe, and is ranketh, but fileth not. It is made by a contrary way to the former. The filing Rhombe began at the front point, & reare points, & proceeded to the flanks. This beginneth at the flanke points, & proceedeth to the front and reare. First therefore a ranke is to be laid of what number you list. Alian would haue it of an euen number; but it will fall out as well in an euen number, as the figure sheweth. To the distances of this ranke you must lay 2 ranks more, one on either side, whose number must be one lesse a peece, than the former ranke. Thus continue laying ranks still toward the front, and reare, and in euery paire of ranks diminish one a peece, till you come to the points, either of which haue but one, namely the Captaine, & the Lieutenant, and the Rhombe will ranke, and not file.

CHAP. XX.

The ordinary horse troupe
consisting of 64.



† facit cap. 46.

u Polyendib. 17. 21.

The place of Horsemen in the field, the number of an usual horse troupe, the degrees, and names of the officers of the Horse in general.

CHAP. XX.

TH² Troopes of Horse, as the light-armed, are placed sometime before the *Phalange*, sometime on the right, or left hand in *flanks* of the *Phalange*, sometime behind the light-armed in the *Reare*. For our purpose, let them be placed in the *Reare*, and let the first Troope be of 64 men, and the first ranke thereof 15 Horse. The next 13. The next 11; and in all the rest abate 2, till you come to the last, which is one.

² He shall carry the *Coronet*, that standeth in the second ranke next the *Rank-Commander* on the left hand. All the Troopes shall be 64 in number. The horsemen in all 4096. ³ Two Troopes are called an *Epitarchy* of 128 horse. Two *Epitarchies* ⁴ a *Tarentinarchy* of 256 horse. Two *Tarentinarchies* ⁵ an *Hipparchy* of 512. Two *Hipparchies* ⁶ an *Ephipparchy* of 1024 horse. Two *Ephipparchies* ⁷ a *Telos* of 2048 horse. Two *Telos* make ⁸ an *Epitagma* of 4096 horse.

Notes.

H *liberty of squares and Rhombes, usual horse battailes amongst the Græcians. Now followeth the horse battaile of the Macedonians, of which Ælian hath thus afterward: This forme of horse battaile is called a wedge by Tacticks, and it was invented by Philip King of Macedonia, who placed his best men before, that by them the weaker might be held in, and inabled to the charge. As in a spear, or sword, the point whereof by reason of sharpnes quickly piercing maketh way for, and leaveth in the middle blunt yron. I have spoken somewhat of the wedge in the two last Chapters. Ælian in this Chapter sheweth the number, and manner of framing it, and how many trouper ought to attend the Phalange, and under what officer, and degrees.*

¹ Let the first troupe be of 64 men] The number of the wedge ought to be 64 horse. You make it beginning (as the Rhombe thus ranked, but filed not) with a ranke of 15 horse. Then must you proceed toward the front, with an other ranke of 13: the middle man filing with the middle man of the first ranke, and the rest with the rest. And so you are to continue abating still two in every following ranke, till at last you come to one, who is the *Commander of the Troupe*, and standeth in the point of the front.

² He shall carry the *Coronet*] The place of the *Coronet* is not right set downe in the figure. He there standeth on the right hand of the middle man of the second ranke, whereas he should stand on the left. And you must not account the second ranke to be the ranke next to the *Commander* in the front; but as Ælian doth, that was secondly placed after the first consisting of 15, which was in the *Reare*. So that the *Coronet* is to stand in the next ranke to the *Reare*.

But here is nothing said concerning the distances, that ought to be betwixt horse, and horse. Of the distances betwixt foote, and foote he hath spoken in the 11 Chap. But of the distances betwixt horse, I finde nothing, but generall words. Thus which wanteth in Ælian, I will supply out of other Authors. We must understand then, that two kind of distances were observed amongst horsemen; one for marching, an other for fight.

In marching there ought to be 6 foute betwixt horse and horse. *Ælian* hath before given this distance to the foute. And that *horce* held it likewise appeareth by *Polybius*. Who reprehending *Calisthenes* for carelesse in describing the battaile betwixt *Alexander* and *Darius* as *lissos*, specially taxeth this: That he placed thirty thousand horse, and thirty thousand mercenaries, in foueteene furlongs of length, whereas the place was not capable of halfe the horse. His words haue this sense; The order of horse, when they are prepared for fight, is for the most part 8 in depth. And there is a distance to be left in front betwixt euery troupe, to giue liberty to wheele and double wheele. So that one furlong will containe 800 horse; and 10 furlongs 8000; 4 furlongs 3200: And eleuen thousand, and two hundred horse will fill the space of 14 furlongs in length. The words seeme at first somewhat obscure, being well weighed they will be cleare enough. *Polybius* saith, that these 800 horse were ordered 8 in depth, and that they took up a furlong of ground in length. There must be therefore of them a hundred files. For a hundred files of 8 horse a peece, will arise to 800 horse. Compare then these 100 files, (the length of the battaile) to the length of a furlong. And seeing a furlong containeth 400 Cubits, or six hundred foute, euery file shall haue 4 cubits, or 6 foute space betwixt them. And so the distance betwixt file and file in a march will be 4 Cubits, or 6 foute. The other distance of three foute appeareth in *Leo*, whose words stand thus: Put the case, that the battaile is of 600 horse in length, and 300 in depth, seeing that euery horse in length of the battaile possesseth three foute in breadth, the number of foute will amount to 1800; And seeing againe that euery horse in depth possesseth 8 foute, there will arise hereof 4800 foute; so that in the foure-sided figure, out of the length of 1800, and the depth of 4800 foute arise 720 Myriads of square foute. And the Perimeter alone of the outward foure sides containeth 11600 foute. And because 6 foute make a fathome, and 100 fathoms make a furlong, and 7 furlongs, and a halfe, make a mile, the whole Perimeter of 11600 foute will come to two mile, and a halfe, and neare a 10th part. In this distance therefore according to the closest order, or shutting, the thirty thousand horse are contained. But if they stand not so close, you must alter your account according to the thinnesse, and out of the greatnesse of place coniecture of the multitude of the people. So *Leo*. Which place alike it seeme to require a large interpretation, because many things worth the noting offer themselves in it; yet for this time I will only insist upon that, which I first propounded, that is the distance of three foute betwixt horse, and horse, when they goe to charge (for that is the meaning of *Leo*, when he speaketh of the closest order) which distance is expressly here set downe. And the matter will yet seeme more cleare, if we adde the words of *Leo* in the Paragraph next, but one, to this, which are these: The oldest Tactics in ordering of foute Battailes giue euery man at the first distance foure Cubits; when the battaile is closed two Cubits; when fettered and shut one Cubit. Out of which proportion a Scout may exactly discover by the quantitie of the place the number, not onely of horse, but of foute also. These oldest Tactics that *Leo* mentioneth agree with *Ælian*, as wee haue seene. But where the foute haue three distances, the horse are to haue but two. The open order of six foute they ought to haue, and likewise that of three foute; neerer they cannot come together, because of the breadth of their horse, and because they are to haue room sufficient for the wielding of their weapons.

All the Troupes are to be in number 64. A Troupe consists of 64 men, and so the Phalange belong 64 Troupes, as the Phalange containeth 64 Ensignes, or *Synagmas*.

a Polyb. lib. 12.
63. A.

o Leo cap. 17.
§ 19.

tagma's of armed foute. To which Ensignes the 64 Troupes of horse are proportioned. Their place is according to *Ælian* after the light-armed; not one troupe after, or behind another, but one beside another, in one front; and that from in a right line, which stretcheth out, as long as the Phalange of armed it selfe. Now the files of the armed being 1024 in number, and the number of the horse in the last ranke (which containeth the length of the horse-battaile, and should answer the number of files) but 960, we must seek out a proportion to make the length of both equal one to another. The difference then betwixt them in length is 64 men, which in order take up 192 foute. And where there goe foure Phalangarchies to a fourfold Phalange, and 16 troupes of horse are placed behind euery Phalangarchie, we must diuide these 192 foute into foure parts; euery of which parts will amount to 48 foute, and giue to each troupe three foute distance one betwixt another (for distances betwixt one troupe, and another, *Polybius* holdeth necessary) and so shall the 16 troupes of horse take up as much ground in length as a Phalangarchie. The one containing 256 files in length which occupy 768 foute of ground; and the other 240 men in the last ranke, which occupy 720 foute. To which adding 48 foute of distance, there ariseth the euen number of 768. And so shall the 64 troupes of horse be euen in length with the fourfold Phalange.

The names of the Offices, and Commands of the Horse follow, wherein as I before noted in the foute, we must not presse too neare the property of words, but take them, as they haue bene used among Souldiers.

3 Two troupes are called an *Epirarchie*. One troupe is called *Ile*, and the Commander an *Ilarch*; for so he is termed before in *Ælian*. Two troupes an *Epirarchie*, and the Commander an *Epirarch*, as it were a Commander ouer two *Iles*, troupes. He hath 128 Horse vnder his command.

4 A *Tarentinarchie*. Of *Tarentines* mention is made in the second Chapter. The name of a *Tarentinarchie* is not given to this Troupe, because it consisted of *Tarentines*, but because of likelihood the *Tarentine* horsemen had so many in strength, *Leo* is he, as it will, is signifieth here a troupe of 256 Horse.

5 An *Hipparchie*. Properly signifieth the command of horse, and *Xenophon* useth the word *Hipparch* for the Generall of horse; but *Ælian* and the *Tactics* use it for the command of 512 horse.

6 An *Ephipparchie*. As it were a command ouer two *Hipparchies*, or ouer 1024 horse.

7 A *Telos*. The name of *Telos* is given both to a body of horse, and to a body of foute. A *Merarchie* was called by some *Telos* (saith *Ælian* before) and contained 2048 armed. The *Telos* of horse containeth 2048 horse. So the bodies are equal in number. The word sometimes signifieth a Command, or Dignitie, from which signification this body, as seemeth, hath the name.

8 *Epitagma*. The whole body of light-armed was called an *Epitagma*, which name is given likewise to the whole body of horse comprizing 4096 horse. It maye they are both so called, because they are placed behind the Armed, as I noted before. For that place *Ælian* assigneth vnto them.

The diligence to be used in choice, and exercise of the best formes of Battails.

CHAP. XXI.

THese Inventions and conceits of those, that lived in old time, about *Troopes of Horse* are declared, in what forme every one was cast, and for what cause forme used one forme, some another. Now it behooveth (as in things that carry with them great difference) not carelessly, and negligently, to rely upon the bare precepts; but rather by daily exercise to make tryall of every kind of figure, and so attaining to the perfect knowledge of that, which is readiest, and of most advantage, to admit and receive it in true fight. For it were great simplicity, considering in matters of lesse importance men by curious inquiry reach to the exact finding out of many things, herein not to ground upon perfect and sure experience, before we come to ioyne with the enemy.

Troopes may be enlarged or lessened, as it shall seeme convenient to him, that hath the command.

Of Chariots; the names, and degrees of the Commanders.

CHAP. XXII.

As for ordering *Chariots* and *Elephants*, albeit they are worne out of use, yet to make up the measure of this discourse, I will remember their names, as they are set downe in ancient writers. In the Art of ordering *Chariots* for the field, they call two *Chariots* a *Zygarchie*; two *Zygarchies* a *Zyzygy*; two *Zyzygies* an *Epyzygy*; two *Epyzygies* an *Hartamarchie*; two *Hartamarchies* a *wing*; two *wings* a *Phalange*.

A man may use many and sundry *Phalanges* of *Chariots*, and yet retain the same names in every *Phalange*. Some have framed simple *Chariots* to serve without; other some have armed them with *Sikes* prominent and standing out on each side.

Notes.

There were two kinde of *Chariots* used of ancient time, the one a simple *Chariot*, the other a *Chariot* armed with *Sikes*. The first kinde was used by the *Heroes* (as they terme them, that is the renowned *Soldiers* of old, such as were *Achilles*, *Hector*, *Cynus*, *Enceas*, *Tumus*) as appeareth by *Homer*, *Virgil*, *Ovid*, and other *Poets*. The last was brought in by the *Generalls* of later times, especially by those that reigned in *Asia*, and in *Africa*. For the *Europeans* have counted them fruitlesse, and vaine mockeries them only, because both they, and *Elephants* were in his time growne out of use. Wherefore I meane likewise to passe them over slightly, onely directing the Reader, that is desirous to understand their manner of fight to places of *Historie*, where they are mentioned. And first see for their

Forme.

Forme. *Xenoph. Cyrop. lib. 6. 152. D. E. & 156. B. C. de exped. Cyr. lib. 1. 264. A. B. Liv. decad. 4. lib. 7. 142. A. Diodor. Sicul. lib. 17. 596. Quint. Curt. lib. 4. 119 & lib. 8. 371.*

Their violence. *Diod. Sicul. lib. 17. 593.*

Their place in the battail. *Xenoph. Cyrop. lib. 6. 168. C. D. Liv. decad. 4. lib. 7. 142. A. Diod. Sicul. lib. 14. 408.*

Remedies against them. *Diodor. Sicul. lib. 17. 592. 593. Xenoph. de exped. Cyr. lib. 1. 265. Liv. decad. 4. 142. Quint. Curt. lib. 4. 141. Plutarch. in Sylla.*

I come to the names of the Commanders of Chariots.

1 A *Zygarchie*] The command of two *Chariots*; as it were a yoke of *Chariots*.

2 A *Zyzygy*] The command over two yokes, as it were, of *Chariots* joined together; that is over 4 *Chariots*.

3 An *Epyzygy*] The command over foure yokes of *Chariots*, that is over eight *Chariots*.

4 An *Hartamarchie*] Properly the command of *Chariots*. But used by *Ælian* for the command of 16 *Chariots*.

5 A wing] As soote, so *Chariots*, and *Elephants*, had their wings of battail. To the wing went 32 *Chariots*. Yet finde I this order of imballing *Chariots* nowhere, but in *Ælian*. He that will, let him read the places, that I have noted before, for the ordering of *Chariots*. Notwithstanding I can not doubt, that the names given here by *Ælian*, are taken out of ancient writers.

6 A *Phalange*] It consisteth of 64 *Chariots*; and wee here see, that *Chariots* also had their *Phalanges*, as well as soote, and *Horse*.

Of Elephants; the names, and degrees of their Commanders.

CHAP. XXIII.

Touching *Elephants*, he that is Commander of one *Elephant* is called a *Zourcha*; Of two a *Therarcha*, and the body a *Therarchy*; Of foure a *Epitharcha*, and the body an *Epitharchy*; Of eight a *Harcha*, and the body an *Harchy*; Of 16 a *Elephantarcha*, and the body an *Elephantarchy*; Of 32 a *Kerarcha*, and the body a *Kerarchy*. That which consisteth of 64 wee call a *Phalange* of *Elephants*; as if a man should name the Commander of both the wings a *Phalangarcha*.

Notes.

The use of *Elephants* was greater amongst the people of *Asia* and *Africa*. Those of *Europe* esteemed them not much. And yet we finde, that they were brought into the field by the *Romans* also; who first saw *Elephants* in *Italy* in the warres they had against *King Pyrrhus*. The *Indian Elephants* was preferred before the *African* for greatness of body, strength, and courage. Many things are written concerning the service of *Elephants*. But because *Ælian* toucheth no more, then the names of the bodies, and the degrees of Commanders, I will only note such things, as I finde concerning them in *Histories*. Their kinde of armor, and furniture I have taken out of *Livy*, and expressed them as wee see I could, in figure.

Fig.

The Taſticks

For their power, ſtrength, and manner of fight, ſee Diodor. Sicul. lib. 17. 609. & lib. 19. 717. Polyb. lib. 1. 55. D. & lib. 5. 425. C. 7 their place in battaile, Diodor. Sicul. lib. 17. 685. Arrian. lib. 5. 111. Liu. decad. 4. lib. 7. 141. B. Appian. in Syriac. 107. Polyb. l. 1. 34. D.

The diſtance one from an other. Arrian. lib. 5. 111.

Lights armed in the diſtances betwixt Elephant and Elephant, Diodor. Sicul. lib. 17. 609. & lib. 18. 665. & lib. 19. 685. & 716. Plutarch. in Pyrrho. Remedies againſt Elephants, Diodor. Sicul. lib. 18. 665. & lib. 19. 717. Polyb. l. 1. 42. A. Hirt. de bell. African. 116. Liu. decad. 3. lib. 7. 194. C.

I have noted before the impropriety of names given to militarie bodies as well in the armed and the light armed ſorte, as in horſe troups, and in Chariots. That defect is no leſſe in Elephants. The Commanders and commands of them hauing names, which were at firſt large, and improper enough, but afterward made good by uſe, and received by the Taſticks as ſignificant to expreſſe the things, for which they were invented. The firſt is given to him that is to command one Elephant. Who is called

1 Zoarchos] The Commander of a living creature, that is of one Elephant. The next is

2 Therarchos] A Commander of Beaſts: which name is appropriated to him, that commandeth two Elephants, and the body it ſelfe is named a Therarchie.

3 An Epitherarchie] Having the authoritie over the Therarchie and the body is called an Epitherarchie comprizing ſoure Elephants.

4 An Ilarch] As it were the Commander of a troupe; and the body is called an Ilarchie. It is commonly applied to horſe, and ſignifieth a horſe troupe, and Ilarcha the Capitaine. But here Ilarcha ſignifieth the Commander of 8 Elephants.

5 An Elephantarch] A Commander of Elephants; as though the other bodies before mentioned were not of Elephants. Such ſtraights are men often times driven unto in deuſing new names for new things, which notwithstanding paſſe afterward and growe familiar by uſe. Elephantarcha commandeth 16 Elephants, and the command is called an Elephantarchie.

6 A Keratarch] The Commander of a wing, the body a Keratarchie, hauing in it 32 Elephants. A wing of Chariots had as many.

7 A Phalange] This is the greateſt body and conſiſteth of 64 Elephants. But as Chariots may be ordered into many Phalanges, and yet the ſame names retained in euery one of the Phalanges, ſo it is in Elephants. For that armies haue had in them at once a-

c Polyb. lib. 1. 10. R.
d Diod. Sicul. lib. 17.
e Polyb. lib. 5. 425.
f Plutarch. in Alexand.

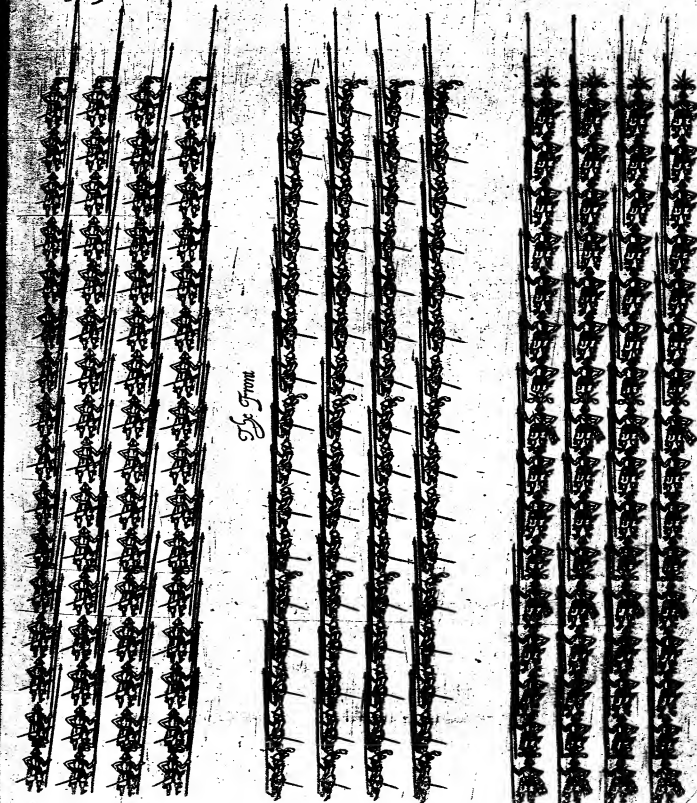
boue 64 Elephants appeareth by Hiſtories. Polybius, and Diodor Sicul. reſſiſſe, the firſt that the Carthagineans, the laſt that King Porus againſt Alexander had the one 140, the other 130 Elephants in their armies. The ſame Polybius ſaith that Ptolomey had againſt Antiochus 73 Elephants in his army, and Antiochus 102. And Plutarch reporteth that Androcottus, King of a part of India, gave to Seleucus at on time 500 Elephants

The names of militrary motions expreſſed in this booke.

CHAP. XXIV.

THEſe haue we ſet downe in particular the kindes of perfect Forces together with the ſeueral names of euery body; Which being premied, it ſeemeth fit

From the rear
To the front



Cap. 25
Change of one Turning of Faces to the
right hand

The first standing

The Front

fit to deliuer the words of exercise, that when the Commander, shall will any thing to be done, the Souldier in daily experience acquainted before with the signification of euery of them, and with the mouing in each figure may easily performe and execute, whatsoeuer is commanded.

There is a motion called *Clisis* whereof one kinde is to the Pike, the other to the Target; Another is called *Metabole*; another *Epistrophe*; another *Anastrophe*; another *Perispasmus*; another *Eperispasmus*; besides we lay to *file*; to *ranke*; to returne to the first posture; to *counter-march*; to *double*. Likewise we vic the words Induction; and Deduction to the right, or left hand; a broad-Phalange; a deepe-phalange; and *unenueu-fronted Phalange*; and *Parembole*; and *Protaxis*; and *Entaxis*; and *Hypotaxis*; and *Epitaxis* and *Proflaxis*. The signification of which words I will shortly deliuer. And yet I am not ignorant, that the precepts of warre are not by all *Tacticks* expressed in the same tearmes.

Notes.

Ælian in the Chapters precedent, hath numbred vp all kindes of forces, as well foote, as Horse, and Chariots, and Elephants, that in ancient time were accounted necessarie for warre. And hath giuen them their armor, and furniture, and distinguished them into militarie bodies, and imbattailed them, and taught the distances, that they ought to hold in fight. It followeth now that he sheweth motions military; which are the life of an armie, and onely giue meanes of victorie; and without which all preparation of forces is vaine, and availeth nothing in the field, nor to the end, for which they were leuied. This Chapter then containeth the names of those motions; the following Chapters the particular explication of them. To which we will note, what we finde in ancient writers. For the signification of the words, I referre them to the severall Chapters, where they are expounded.

Of turning, and double turning the Souldiers faces,
as they stand embattailed.

CHAP. XXV.

Clisis or turning of the face, is the particular motion of euery Souldier declining his face either to his Pike, that is to the right hand, or to his Target, that is to the left hand. The vse of it is, when the enemy sheweth himselfe in flanke² to encompassse our winges, or else to charge vs; or for some other cause, whereof I will speake in convenient place. 3 Two turnings of the face towards the same side transerre the sight of the Souldier to the rearre of the battaille. And this kinde of motion is called *Metabole*: being also vsed either to the Pike, or to the Target. In the first standing the mouing of the Souldiers face toward the Pike is called *Clisis*, the second mouing the same way *Metabole*. For *Metabole* is the conuersion of euery mans face particularly to the place, which was behinde his backe. And the same that *Metabole* is in each seuerall Souldier, the same is *Perispasmos*, or wheeling about in the whole battaille. There are 4 two kinds of *Metabole*, the one from the enemy, the other to the enemy. *Metabole* is defined to be a changing of euery mans face in particular from the front to the

rearre;

reare; or contrariwise. Turning about from the enimie is, when the Souldier turneth his face twice towards the Pike; To the enemy, when hee turneth twice towards the Target.

Notes.

Foure kinde of Motions are set downe by *Ælian* whereby upon any occasion the battaile may be somewhat changed: 1. Turning of faces, countermarch, wheeling, and doubling, whereof the first may be used, in what order soever your battaile standeth the second only in open order, the third in close order only, the fourth either in close, or open order. Clifis, or turning of faces, whereof this Chapter treateth, albeit it may be brought in also in open Order, yet it is not don for the most part but in close order, and then especially, when none of the other motions haue place. The *Græcians* always conented to bring their file Leaders, that is their best men, to fight. In open Order they chose to countermarch; In close Order, hauing place, to wheele their battaile about, and so turne the face of it against the enemy. If they could doe neither of these, they came to the last remedy, which was turning of faces of euery particular man in the battaile.

1. Clifis, or turning of faces] This motion is of lesse paines then any other, but of no lesse importance, or necessitie. In the rest the Phalange chaenge the place, or the forme: In this it holdeth both, and yet is ready for any attempt of the enemy. Onely euery Souldier in particular turneth his countenance to the right or left hand, as he is commanded. To turne his face to the Pike is to turne to the right hand, because that hand bore the pike, to turne to the Target is to turne to the left hand; because the *Macedonians* carried their targets on their left Souldier. For the use of this turning of Faces, *Ælian* saith, It hath place when the enimie sheweth himselfe in flanke

2. To incompasse our wings] Clifis is no more, then bearing faces to the right, or left hand, that is to our wings. When then we finde our enemies, to incompasse our right wing, wee turne our faces, and weapons that way to receive him: to the left, when he cometh to charge vs on that side. If on both sides, then turne wee the faces of our Phalange halfe to the right, halfe to the left hand; which is the *Antilomus Phalange* whereof *Ælian* speaketh hereafter. Briefly, there is almost none of the marching Phalanges which are afterwarde described, but it hath neede of this motion. Besides if upon any occasion the Phalange be to maue from any of the flanks, you are only to command a turning of faces to that flanke, and then to lead on. I will giue an example, or two. ^a Alexander at Arbela hauing imbattaild his armie to fight with *Darius*, had intelligence, that *Darius* had throwed the ground betwixt the two armies with Calthropes. He commanded therefore the right wing, which himselfe led, to turne faces to the right hand, and follow him, to the end to go round about, and auoide the places, that were sowed with Calthropes. *Darius* marching against him to the left hand, disioyned his troups of horse, and *Alexander* taking the advantage, and giuing in quickly betwixt the spaces, put *Darius* to flight. If *Alexander* had marched on with the right front, he had fallen upon the Calthropes. To auoide them, he used the benefit of this motion, and turning faces to the right hand he led on, until hee had passed the danger, and then turning againe to the first posture, went to charge, and defeated the enimie. Another example is in ^b Polybius, who describing the battaile betwixt *Machinidas* the *Lacedemonian* Tyrant, and *Philopemen* the *Achean* Generall, telleth, followed hard the chafe. *Philopemen* as long, as there was hope, indeuoured by all meanes to stay his men: when he law them vtterly defeated, hee hastied to the

right

right wing, and perceiving the enimie busie in chafe, and the place void, where the fight had beene, commanding the first *Merarchies* to turne their faces to the right hand, hee led them on with high speede, not yet breaking the order of their imbattailing. And quickly leazing vpon the forsaken ground, hee both cut betwixt them, that gaue chafe, and home, and withall got the advantage of the vpper ground against the left wing of the armed. Whereby hee obtained the victory. If *Philopemen* had in this action used wheeling of his battaile, which onely was the other motion, which would haue serued his turne, besides the troublement of the winding about, he should haue beene forced to haue used two wheelings, and so failed of the celerity, which was at that time requisite. Faces were turn'd in a trice, and he made himselfe Master of the ground, hee desired, before hee could haue wheeled once his battaile.

3. Two turnings of the Souldiers face] Clifis, or turning faces to the right, or left hand, consisteth of one turning and moueth no further, then the side. If the motion be to the reare, it hath two turnings, and is called *Metabole*, which is defined to bee a changing of euery mans face in particular from the front to the reare, or contrariwise. And as wheeling of the whole body carrieth about the fronts of the battaile to the reare; So doth *Metabole* turne the face of euery particular Souldier, and maketh him looke from the front to the reare. The word properly significth a change, which happeneth herein, when the souldiers are changed from the front to the reare, or contrariwise. The use of *Metabole* is principally to resist the enemy that giues on upon the reare. ^a So *Pyrthus* being entred the *Citie Argos* with a few, and ouerpressed with multitude, retired by little and little, and defended himselfe, often turning his and his souldiers faces against the enemy. ^b So the armie of *Cyrus* the elder retiring from the wallies of *Babylon*, were reported to be on foote, and ready to come and charge them. And if the enemy assault both the front, and reare, it hath beene the manner to continue halfe the souldiers in each file with their faces to the front, and command the other halfe to turne their faces to the reare against the enimie behind. And this forme is called *Phalanx Amphitomos* described by *Ælian* cap. 38. And sometimes it is used to speed our march, and preuent the enimie, as was said before of Clifis. ^c *Agellaius* made an incursion into the Territory of the *Thebans*, and finding a Trench, and Ramper cast vp by the *Thebans* for defence of their Countrey, and onely two narrow waies betwixt, he cast his armie into a hollow *Plinthium*, or square, and led it against the left hand passage, whither all the *Thebans* flocked for defence. But hee turning about faces from the reare, halted away, and gained the other passage, whereinto man was present to resist, and entring spoiled the Countrey, and returned without impeachment.

4. There are two kinde of *Metaboles*] Before were rehearsed two kinde of turnings of faces about, one to the pike, the other to the target, here is added to a more, one from the enemy and the other against the enimie; which are all one indeed, and differ only in name. What the true meaning of these turnings should be, I am in doubt, *Ælian* expounding them one way, *Suidas* another. *Ælian* esteemeth them by the right, and left hand, *Suidas*, albeit he haue that signification also, esteemeth them by the front and reare. The fore *Suidas* defines the turning from the enimie to bee a turning about, toward the reare: that against the enimie, a turning about toward the front. *Ælian* would haue the first to containe two turnings toward the right hand, the second two turnings toward the left. I for my part, esteem rather to *Ælian*. For touch'ing the turnings of *Suidas*, I cannot yet understand, why turning toward the reare should be a turning from the enimie; Or toward the front a turning to the enimie: Considering that whether

^a Polyen lib. 4. in Alexand. § 17.

^b Polyb lib 11. § 14.

^c Polyen lib. 11. Agellaius.

whether sooner you turne faces, the enemy is imagined to be there; faces and weapons being to bee opposed alwaies against the enemy, which is the onely end of turning. Elians opinion seemeth to haue more probability in it, at least if I conceiue the right reason. For I take it thus: That seeing the Græcians (as the Romans likewise) were Targetiers, and caried their targets on their left side, and in fight advanced that side alwaies neerest the enemy, which they sought to couer with their targets, that therefore the turning about to the enemy, was called turning to the Target; as contrariwise turning to the right side, on which side the Pike was caried, and which being naked of such defensive armes was called the open side, and therefore further removed from the enemy, might for the same cause be termed turning from the enemy. So that I take turning about to the enemy, and turning about to the target to be all one, as also turning about from the enemy, and turning about to the Pike, howeouer the name differ. This is my conceiture, which I shall imagine to be true, till I finde some man, that will be pleased to giue me a more probable reason: I only adde now the words of command in this motion.

Faces to the right hand.
 Faces to the left hand.
 Faces about, to the right or left hand. } As you were.
 The figure sheweth the manner.

Of wheeling, double, and treble-wheeling of the battaile,
 and returning to the first posture.

CHAP. XXVI.

E Pistrophe (or wheeling) is when the battaile being so closed, that no man can turne, or twice turne his face by reason of the neerensse of man to man, it wholly, and jointly wheeleth (as a ship, or some other body caried about) the order thereof remaining undissolued. VVhen the wheeling is to the Pike, we warne the right-corner-file-leader to stand still (as it were the hooke of a doore hinge) and the rest of the battaile proceeding forward to turne about the same file-leader like the doore. In the same manner is wheeling to the Target; It may be thus defined: *Epistrophe* is, when (shutting the battaile by gathering close the Followers, and Side-men, we turne it wholly (as the body of a man) toward the Pike, or Target, it being caried about the corner-file-leader, as about a Center, and, changing the place of the front, transference the countenance of the souldier to the right, or left hand; the followers and sidemen euery one remaying in file and ranke as before. How it is to be done I will shew hereafter.

Anastrophe, or returning to the first posture, is the restoring of the wheeling to the place, where the battaile first stood close, before it beganne to wheele. *Perispalmos*, or wheeling about, is the motion of the battaile in two wheelings, so that thereby the front cometh to the place of the reare. *Eperispalmos*, or treble wheeling, is the motion of the battaile in three wheelings, so as, when it turneth to the Pike, the front cometh about to the left flanke; when to the Target, it cometh about to the right flanke.

Notes.

Notes.

THis Chapter hath a diuers kinde of turning from the other mentioned in the last Chapter, which for distinction sake, is called *Epistrophe*, or wheeling. The other turned no more, then the souldiers faces, euery man yet keeping the same ground, he had before. This wheeles the whole body, and changeth the place of the Phalange either to the right, or left hand, or to the reare. And as there was in the turning of faces a particular motion of euery particular souldier to the right, or left hand, called *Cilisis*, and an other turning about called *Metabole*: so is there in this a generall wheeling of the whole body to the right, or left hand, called *Epistrophe*, and an other wheeling about to the reare called *Perispalmos*. But let vs heare the description.

Epistrophe (or wheeling) is, when the Battaille Shortly *Epistrophe* is no more, then the first turning of the battaile to the right or left hand. In doing whereof first the files must be closed to the hand, you meane to wheele, then the ranks. Then the corner file-leader on the same hand is to stand still, then all the rest keeping their files, and ranks closed, to turne to the same hand jointly about the Corner-file-leader circle-wise, who is to move by little, and little, till he haue turned his face to that side, which was intended. And when the first ranke is euen with him, and the rest wheeled enough to the same hand, they are to stand still: The words of the definition of *Epistrophe* (or wheeling) are plaine enough in Elian; I neede vs e no exposition. Now because in exercise we relie not upon one forme of motion alone, but acquaint our souldiers with all the kindes; it is necessarie to bring the body againe to the first place, to the end we may proceede in the rest. This reducing to the first Posture is called *Anastrophe*, by which the battaile returneth, but by a contrary hand, so that, to which the *Epistrophe* was made. And but for changing the hand the wheeling backe againe is all one with the wheeling forward. Wee shall see hereafter how it is done. To bring the battaile to haue the front, where the reare was, you must vs e a double wheeling. And that is called *Perispalmos*. Which cometh of two *Epistrophes*, and is made either to the right, or left hand. Onely it must be obserued, that if the *Perispalmos* (or wheeling about) be to the right hand, the *Anastrophe* (or reducing to the first posture) must be to the left. Contrarie it is if the *Perispalmos* were to the right hand.

Eperispalmos I could neuer hitherto conceiue any use of a treble wheeling (for so Elian takes the word) vnlesse a *Perispalmos* were first made, and the battaile had the front already brought to the reare, and so an *Epistrophe* added from the reare to the same hand. Otherwise seeing that one wheeling is sooner made, then two, and therefore sooner then three, I see no neede of three wheelings, especially seeing we may doe that, we desire with one. For example, let vs wheele our battaile thrice to the right hand, the front will come to be in the place of the left flanke. The same will be performed as well with one wh eeling to the left hand. Et frustra fit per plura, quod potest fieri per pauciora, especially in matter of warre, where the least moment of time often carrieth the whole business. The like may be said of *Eperispalmos* to the left hand.

The use of the motions of wheeling, and double wheeling, is, when the battaile being closed, and the enemy comming to assault you in any one place, then the front, you seeke to bring the best men to fight. For if you be to be charged in two places at once, or more, wheeling helps little; except it be to turne the front to one enemy, and in that case your onely shift is, to turne faces against them, that come so charge, on what side sooner they come. Examples of these two motions, I meane *Epistrophe*, and *Perispalmos* meete vs almost in euery Greeke Historie. Of which I will represent one, or two, especially of the latter.

The Tactics

latter; he rather because practise giueh both light, and life to precepts. * Plutarch recounteth, that after King Pyrrhus, had in vaine assaulted Sparta, he was invited by an Argiuan named Ariflam to receiue Argos into his protection, and that hee marched thitherward with his armie. Ariflam the king of Lacedemonia laying ambushes for him, and taking the principall streights, by which he was to passe, charged his reare, wherein the Galatians and Molossians were. When Pyrrhus heard the bruite and noise, he sent his sonne Ptolemy with the band of Companions to aide, himselfe with all speede marching out of the streights, led on his armie. The medly being sharpe about Ptolemy, and the chosen Lacedemonians commanded by Eualcus standing close to their busines, Orestus a Caudiot of Apera, valiant of his hands, and swift of foote, running crosse against the young Prince gaue him a deadly stroke and ouerthrew him. His fall made the rest to flie. And the Lacedemonians hauing the victorie, and following the chafe came into the Champion ground still killing but not remembering they were not followed with armed foot. Vpon whom Pyrrhus, hauing euen then heard of, and being much moued with the death of his sonne, wheeled about the Molossian horsemen. And himselfe first aduancing vpon the spurre imbrued himselfe with the slaughter of Lacedemonians. He alwaies seemed mighty, and terrible in armes, but then he exceeded himselfe in daring and valor. For turning his Horse vpon Eualcus who shunning him, shifted aside, and with all strooke at his bridle hand as he passed by, and wanted but little of cutting it off. But missing the hand, he light vpon the raines, and caried them quite a funder. Pyrrhus with all strooke him thorough the body with his Launce. Then leaping from his horse, and fighting a foote, hee cut in pieces the chosen Lacedemonians, that fought to recouer the body of Eualcus. This was the fight that Pyrrhus made by wheeling about his Horsemen against the Lacedemonians, that followed vpon his Reare. Another example of Wheeling about is reported by Polybius, and it is of Amilcar Annibals father, this is the history. The mercenary souldiers of the Carthaginians revolted from them, and ouerthrew some of their Generalls, and shut them vp within the Citie of Carthage, possessing both other streights, that led into the Countrey, and also a bridge laide ouer a riuer called Astar, which riuer was not passable, but by that Bridge. Besides, they built a City for defence of that Bridge. Amilcar seeking to dislodge the enemy from that Bridge, and hauing no way to come at them conveniently; obserued, that when certaine winde blew, the mouth of the riuer toward the sea was commonly filled vp with sand, and would giue passage sufficient for his armie. Finding then a fit time, hee put ouer his army in the night, and before day, or ere any man knew of it, made himselfe Master of the passage, and presently led against them, that held the bridge. Spendius (hee was one of the chiefe Rebels) hearing thereof, aduanced to meete Amilcar in the plaine, and of both ten thousand from the City at the bridge foote, and fifteen thousand more from Nica, came out one to aide another, thinking to wrappe in the Carthaginians betwene them; who were not about ten thousand Souldiers of all sorts, and 70 Elephants. Amilcar led on his armie. Before were the Elephants, the horse, and light armed followed next, the armed foote came last. And perceiving the enemy, that followed his Reare, pressed hard vpon him, he commanded his whole armie to tume about. Those that were in the Vanguard of the march hee willed to returne to him with speed; the other, that at first had the reare, hee wheeled about, and straight opposed against the enemy. The Libians and mercenaries imagining the Carthaginians fled for feare, fell vpon them disorderly, and boldly came

to

of Aelian.

to hands. But when they saw the Horsemen, being now turned about, and come vp neere to the foore, and already put in order, make a stand, they themselves, by reason they looked for nothing lesse, fell into a feare, turning their backs fled presently, as before they gaue on vnadvisedly, and straglingly. And some of them falling vpon their owne people, that were coming on, wrought both theirs, and their owne destructions: other some were trampled vpon, and rode to death, by the horse, and Elephants, that followed the chafe. Thus saith Polybius. And thus saith of Wheelings. The figure, and words of command are referred for the 32 Chapter, where the manner of wheelings, and returning to the first posture is set downe.

Of filing, ranking, and restoring to the first posture.

CHAP. XXVII.

TO file is, when euery particular man keeping equall distance from other standeth in his owne file lineally betwixt the file-Leader and bringer-vp. To rank is, to be in a right line euen with his sidemen in the length of the battaile. To restore to the first posture is, to bring the sight of the Souldier to the same aspect, he had before the first turning. As if his face were at first towards the enemy, being commanded to turne towards the Pike, and thence to returne to his first posture, hee is againe to returne his face toward the enemy.

Notes.

OF filing, and ranking enough is spoken before. To restore to the first posture. This motion differeth from Anastrophie before specified. For Anastrophie bringeth backe againe the whole body to the first place after a Wheeling: This the Souldiers faces particularly to the first aspect. So that this is used after the making of an Anastrophie. For alwaies in motions it is requisite, that the Souldiers faces moue forward. To moue backward hath many inconueniences of stumbling vpon uneven ground, or stones, or pittes, or such like. Which is the cause that in Anastrophie after a Wheeling, Aelian willeth, that the Souldiers turne their faces the contrarie way first, then moue on, till they haue recovered their first ground, then open ranks, and files, and lastly to restore to the first aspect. And as it differeth from Anastrophie so differeth it likewise from Metabole. Metabole only turned faces about, this setteth the Souldier in his former posture, not onely for his face, but for his armes, also, which are ordered as at first. The wordes wherein this motion is expressed by Aelian are Eporthon apodounai, and Eis orthon apocatastesai, which is interpreted by Gaza in arrectum reddere, to restore vp right, by Arcerius rectum reddere, to restore right, and so the words sound. Aelian interpreteth it to set againe the Souldiers fight in the same aspect in which it stood at first: as if being placed with his face against the enemy he be commanded to turne his face to the Pike, and then againe to restore his face to his first posture, he must returne, and set his face against the enemy. Aelian therefore referreth it to the fight, he first had, which if it bee the right meaning, how can it

The Tactics

a Paulin in
Antea 47.
b Paulin in
Corinth 89.
c Paulin in
Corinth 87.

be upright, or right, more in that, then in any other posture. For the Souldier not onely in front, but in flanke, and in the reare carrieth himselfe upright, or right. I doubt not, but that it may be applied to the upright standing of men, as appeareth by sundry places of Pausanias: *Wherebergeth, that Minerva Image set in the Temple Parthenion standeth upright, orthon est, and in another place, that in Corinth in the Temple Pantheon, there were two Images of Mercurie standing upright, Ortha,* and that in the Temple of Fortune the image of Fortune was carved of Parian stone, and stood upright; Orthon: and that in Neptunes Temple situate in the Corinthian Isthmus, the images of Amphitrite and Neptune stand in a Chariot, and the boy Palemon upright upon a Dolphin, Orthos. In all which places Orthos designeth the site of men. But here, as I take it, it cannot be so applied. Because in every motion, not onely in this, the men stand upright. How then can they be restored to their standing upright, when they doe it already. I take the originall of the appellation to come from another cause, and that is from the ordering of the Pike. For when the battaile is first set in the field, every Souldier standes with his Pike ordered, that is upright. For to order a pike is to set the butt end on the ground before the Souldier somewhat aside of his right foote, and to hold it upright with the right hand borne even with the shoulder. But when you beginne, or continue any motion, the manner is to aduance, or to shoulder the Pike, and so to proceede. But being commanded to returne to the first posture, it must be ordered againe. So that the first posture of an armed man is to stand with his pike upright. And after many motions and windings, he at last returneth to the same posture, which I take the command of Ep' orthon apodounai to signifie. Now that I may not seeme to relye upon a probable conjecture alone, I will bring witness for the confirmation of my opinion. It is reported by ^a Diodorus Siculus, that Agesilaus the Lacedemonian King with an armie of eighteen thousand foote, and fifteen hundred horse, invaded *Bœotia*. The Athenians before hearing of Agesilaus comming had sent five thousand foote, and 200 horse to aide the Thebans, who gathering their armie together seized upon a long narrow hill distant 20 furlongs from the City; And making the hard access to the place a kinde of fortification against the enemy, they there waited his comming, fearing to hazard upon even ground in regard of the renowne, and glory of Agesilaus. Agesilaus, having imbattailed his troups, led them against the *Bœotians*; and approaching neere, sent his light armed to found their disposition to fight, which being easily repulsed by the Thebans by the aduantage of the higher ground, hee advanced the rest of his forces being imbattailed in such manner, as might give greatest terror. Chabrias the Athenian willed his Souldiers to awaite the enemy contemptuously both keeping their first array, and their Targets at their knees, and continuing their Pikes upright ordered, who when they jointly as upon a word given, did as they were commanded, Agesilaus both wondering at the good order, and at the assured fashion of the enemy thought it not fit to strue with vnequall ground, and by forcing them to fight, to compell them to be valiant, whether they would, or no. *Hitherto Diodorus Siculus of the Strategem of Chabrias against Agesilaus, which consisted in the contempt of Agesilaus, and all his forces: First in not stirring one foote, to meete the enemy, then in keeping the array they held before, further in sincking their Targets to their knees; Lastly in continuing the former order of their Pikes, that is not making ready to charge, but remaining with their Pikes ordered, as they were at first.* Agesilaus aduancing his armie thought to strike a feare into his enemy, Chabrias trusting to the strength of the place, scorned the Brouado of Agesilaus, conceiuing, he would not be so hardly to adventure the fight upon so great an inequality of ground. He therefore willed the souldiers

d Died. Sicul.
lib. 15. 473.

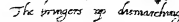
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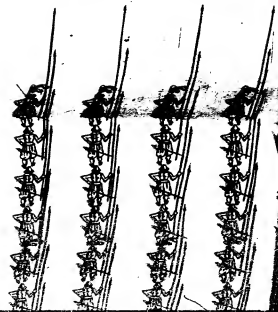
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The rears

The Countermarche in action



The front after Countermarche



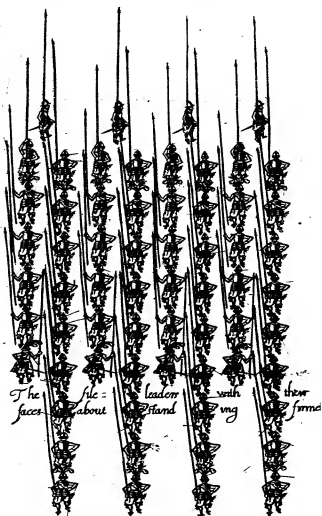
the images of Amphiprotus and Neptune stand in a Christ, as the very Philemon up-
right upon a Dolphin, Orithos. In all you to place Orithos against the fire of men,
But here, as I take, it cannot be so applied. Because in every motion, not only in this, the
one, stand upright. How then can they be ordered to their standing upright, when they
do it already. Take the originall of the appellation to come from another cause, and
that is from the ordering of the Pike. For when the battaile is first set in the field, every
Souldier standes with his Pike ordered, that is upright. For to order a pike is to
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to hold it upright with the right hand borne even with the shoulder. But when you be-
ginne, or continue any motion, the manner is to advance, or to shoulder the Pike,
and so to proceed. But being commanded to returne to the first posture, it must bee
ordered againe. So that the first posture of an armed man is to stand with his pike up-
right. And after many motions and windings, he at last returneth to the same posture,
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contempt of Agesilaus, and all his forces: First in not stirring one foote, to meete the
enemy, then in keeping the array they held before; further in sticking their Targets
to their knees; Lastly in continuing the former order of their Pikes, that is not mak-
ing ready to charge, but remaining with their Pikes ordered, as they were at first. Age-
silas advancing his armie thought to strike a feare into his enemies, Chabrias trusting to
the strength of the array, formed the Broadside of Agesilaus, conceiuing, he would not be so
hardy to aduance the fight vpon so great an inequality of ground, he therefore willed the
souldiers

The front of the first standing



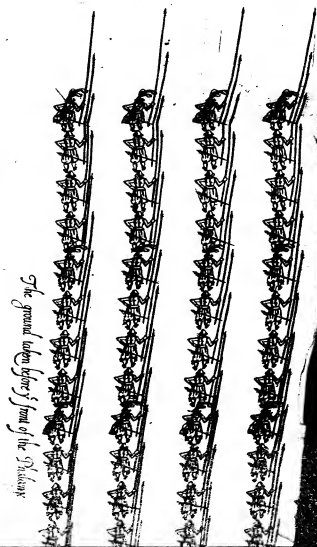
The rear

The Countermarch in action



The front of the first standing

The front after Countermarch



The ground where they first stood

The Lacédemonian Countermarch

The Countermarch in action

The file-leader advancing in Counter march

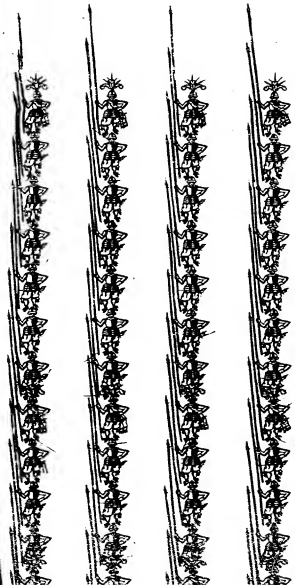
The ground which beyond the rear of the Division

The front after Countermarch

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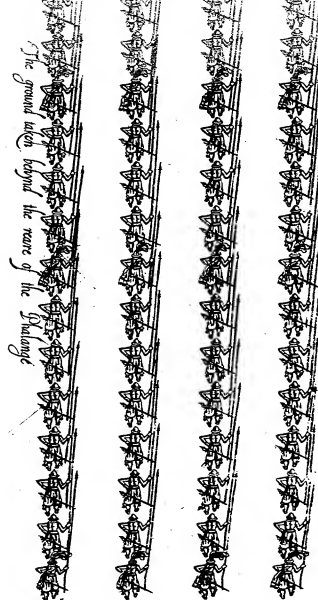
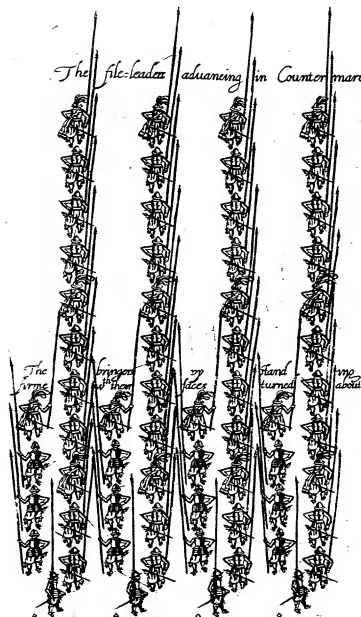
great an inequality of ground

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The Countermarch in action

The file-leader advancing in Counter march



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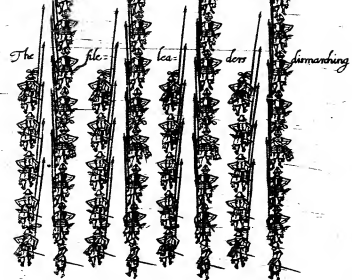


The front in the first standing

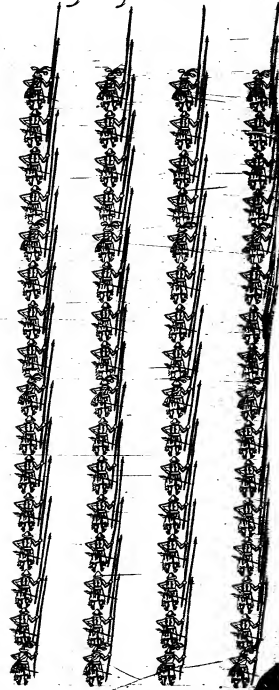
Cyr. 20
The Grecian Countermarch

The Countermarch in action

The Countermarch in action



The front after Countermarch

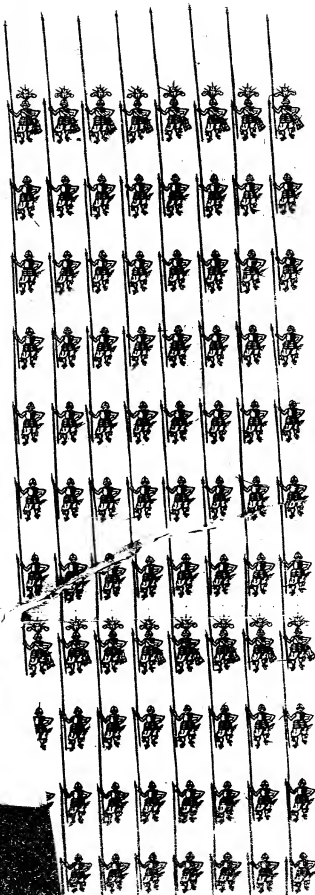


a. Douce
b. Paul
c. Corrad
e. Paul
Corrad

d. D.
lib. 1

Op. 20
Cuneiforme by Ranke

The Cuneiforme in action



diers not to alter their posture, but to continue as they were. The words concerning the Pike are: En ortho to dorati menein. That is to continue their pikes vpright (En ortho) Now whether the same be the posture, that the Tactics describe, when they speak or restoring Ep' ortho, vpright, I referre to the judgement of the Reader. ^a Polienus remembreth this Stratagem wth somewhat different words, and yet consenteth in Agellauo. ^b Polyen. lib. 4. in weaning. Chabrias saith he, commanded his Souldiers not to runne out against the enemy, but quietly to stand still holding their pikes before vpright, and their Targets before their knees which they were wont to doe, when they would a little ease themselves of the weight of their Targets. Where Diodore, hath en ortho to dorati menein, to continue their Pikes vpright. Polienus hath protinomenous to dorata ortha, holding before them their Pikes vpright. But both haue pikes vpright, and Diodorus his Continue hath relation to the Posture they were in, which Chabrias would not haue them to alter: Polienus his hold before to that they were commanded to doe. In ordering of Pikes as this day I haue shewed, that the Souldiers hold them vpright, the but end set on the ground before, and somewhat wide of their right foot. ^c Æmilius Probus reciting this historie peruersteth the Stratagem: He saith that Chabrias forbad the Phalange to giue backe, and taught his Souldiers to receiue the enemies charge kneeling with one knee, the other set against the Target, and with the Pike abafed. Wherein hee quite dissenteth from Diodore, and Polien. Diodore saith, the command was to keepe their array; Polienus not to runne forward, but quietly to stand still; Probus not to giue backe. Probus saith, they should kneele with one knee, and rest against the Target with the other; Diodore that they should hold their Targets sunke to their knees; Polienus that they should carry their Targets before at their knees. Probus that they should abafe, and charge their Pikes; Diodore that they should continue, and order them vpright; Polien that they should hold their Pikes vpright. So that Diodore and Polien agree, and expound one another: Æmilius Probus bringing in a new historie dissenteth, as I said, from the other two; especially in making that to be a forme of fight prescribed by Chabrias (a simple forme to receiue the charge vpon their knees) which was a contempt, to shew how little, especially in that strength of ground, he regarded Agellauo; which contempt also made Agellauo retire, not doubting but it proceeded from a great assurance of the enemy. Therefore as I said I take these words ep' orthon apodounai, not only to appertaine to the aspect of the Souldier, but also (and that much rather) to the erection, and ordering of Pikes.

^b Æmil. Prob.
in Chabrias.
107.

Of Countermarches, and the diuers kindes thereof, with the manner how they are to be made.

CHAP. XXVIII.

There are two sorts of Countermarches, one by file, the other by ranke; each of these againe is diuided into three kindes. The first called the *Macedonian*: The second the *Lacedemonian*: The third the *Choraan*, which is also the *Persian*; and the *Cretan*. The *Macedonian* is that, which leauing the ground, it first had, taketh in lieu thereof the ground, which was before the front of the *Phalange*, and turneth the aspect of the Souldier backward [where before it was forward.]

2 The *Lacedemonian* is that, which leaving likewise the ground it first had, raked in stead thereof, the ground which was behinde the Rere of the *Phalange*, and turneth also the face of the Souldier the contrary way.

3 The *Persian* is the *Cretan*, and *Choræan*: This keepeth the same ground of the *Phalange*, every souldier taking another place for that, he had, the file-Leader the place of Bringer-up, and so the rest in order; and turneth also the face of the Souldier the contrary way.

4 *Counter-marches* by ranke are made, when a man would transferre the wings into the place of the Sections; and the Sections into the place of the wings, to the end to strengthen the middelt of the battaile. Likewise the right hand parts ingo the left hand parts, and the left hand parts into the right hand parts. They that feare to counter-march the *Phalange* in grosse the enemy being at hand, doe it by *Synagmæ*.

I will now let downe, in what manner counter-marches ought to be made.

The *Macedonian counter-march* by file is said to be, when the file-leader turneth about his face, and all the rest with the Bringer-up go against him on the right, or left hand, and passing on to the ground before the front of the *Phalange* place themselves in order one after an other, according as the file-Leader himselfe hath turned his face. Therefore it maketh shew to the enemy appearing in the Rere, of running away: Or it is when the file-Leader turneth about his face, and the rest passing by him on the right or left hand place themselves orderly one behinde another.

But the *Lacedemonian* is, when the Bringer-up turneth his face about, and all the rest turning also their faces, and proceeding forward together with their file-Leader order themselves proportionably in the ground, which was behinde the Rere of the *Phalange*. Wherefore to the enemy appearing behinde, it makes a semblance of falling on. Againste the *Lacedemonian* is, when the file-Leader turning his face about to the Pike, or Target transferreth the whole file to another place equal to the first; and the rest following stand, as before, behinde him. Or else, when the Bringer-up turneth his face about, and hee, that stood next before him, passing by on the right or left hand, is placed againe next before him, and the rest following are placed one before another in their former order till the file-Leader be the first.

The *Choræan* is, when the file-Leader turning about toward the Pike, or Target, precedeth the file, and the rest follow, till the file-Leader have the place of the Bringer-up, and the Bringer-up the place of the file-Leader. And these are the Counter-marches by file.

In the same manner are *Counter-marches* made by ranke in case a man would counter-march by ranke. For every ranke Counter-marching either keepeth the same ground, or changeth the right hand place, or else the left hand place, of the battaile, one of which must needs fall out, and neuer faileth.

Notes.

The two former motions are performed, one in close Order, the other in all Orders; Epitrophe when the battaile is first in close, that (as Elian saith) a man can turne his face neither the one way, nor the other. Clisis in open Order, Order, and close Order. The two following motions, Counter-march, and Doubling, one is done in open Order, the other for the most part in open order too; and yet sometimes in Order, and close

close order; as we shall see in due place. This Chapter handleth Counter-marches, the next Doublings. Counter-march is a motion, whereby every souldier marching after other, changeth his front for the reare, or one flank for the other. For there are two kinde of Counter-marches, one by file, and the other by ranke. And each of these is againe divided into three; the first is called the *Macedonian*; the second, the *Lacedemonian*; the third the *Choræan*, or *Cretan*. A Counter-march by file is, when every souldier followeth his Leader of the same file, By ranke, when every souldier followeth his sideman of the same ranke in the Counter-march.

1 The *Macedonian Counter-march* in this Counter-march, the purpose of the Commander is to turne the front of his battaile against the enemy that sheweth himselfe in the Rere; and withall to take the ground that lyeth before the front of the *Phalange*. It is called the *Macedonian Counter-march* (saith Elian) because the *Macedonians* were the inventers of it. Which of the *Macedonians* he telleth not, but includeth Philip, and Alexander, who both used the *Lacedemonian Counter-march*. And before their times I have not read of any warlike Kings of Macedonia. The manner of it is this; First all the file-leaders turne their faces about either to the right or left hand, then the next ranke passeth thorough by them on the same hand; and being come to their distances, place themselves directly behind their file-leaders, and then turne about their faces the same way. And so the third ranke after them, and the fourth, and all the rest, till the Bringers-up be last, and have taken the reare of the battaile againe, and turned about their faces. The figure expresseth not well the action. For in it the Bringers-up begin first to counter-march, which according to Elian should come last. Yet may this Counter-march be done, as the figure is. But I take Elians way to be easier, and readier. And it may be also, that the Counter-march expressed in the figure is left in the text. For one of the *Lacedemonian Counter-marches*, which proceedeth the contrary way, beginneth the motion with the file-leaders, as this doth with the Bringers-up, as wee shall straight see.

2 The *Lacedemonian counter-march* in this Counter-march the proceeding is contrary to that of the former; that took the ground before the *Phalange*, this takes the ground after. In that the moving was from the Rere to the front, in this from the front to the reare. This is the invention of the *Lacedemonians*. Elian describeth it to be done in two manners: One, when the Bringers-up first turne about their faces, and the next ranke likewise turning faces beginneth the Counter-march, and every man thereof placeth himselfe directly before his Bringer-up, and the third doe the like; and so the rest, till the ranke of the file-leaders come to be first: The other, when the file-leaders begin the Counter-march, and every one in their files follow them orderly. The figure expresseth this last. Elian preferreth the *Lacedemonian Counter-march* before the *Macedonian*: because in it the souldiers seeme to fall on, and got to the charge; where in the *Macedonian* they seeme to flee. There are notwithstanding times, when it is better to use the *Macedonian*. As in case you meane to march on, and not to fight with the enemy, except you be compelled: Or else you seek to gaine some ground of advantage. For the *Macedonian* continueth still the march, and stayeth not; the *Lacedemonian* returneth upon the enemy, and so loseth ground in marching. Agellus after victory gotten against the Argives, against whom he stood in the right winge, hearing that the Thebans had beaten the *Orchomenians* in the left winge, used the *Lacedemonian Counter-march* against them. The words of Xenophon sound thus: Here the strangers were about to crowne Agellus (thinking he had got the victory) when newes was brought that the grec lib 4. Thebans, after they had broken the *Orchomenians*, had forced a passage as farre as the baggage. Then Agellus, counter-marching his *Phalange*, led against them. The

The Thebans perceiving their Confederates were fled vp to the mount *Helicon*, closed their troups together, as neare as they could, seeking to open a way by force, and to get vp into them. *Agessilaus* albeit he might by guining way to the formolt have followed them at heeles, and charged the reare, yet did he it not, but met the Thebans front to front. Thus encountering, and clashing their Targets together they fought, thrust on, killed, and were killed. In fine some of the Thebans broke thorough to *Helicon*; other some, as they fought to escape, were left dead on the place.

Xenoph. hist.
græc lib. 6.
607. D.

Agessilaus here followed the chase upon the Argives toward the mount *Helicon*: The Thebans upon the Orchomenians the contrary way towards the enemies Campe. The Thebans seeing their confederates fled to the mount *Helicon*, returned toward them, *Agessilaus* countermarched to meete them, met them, and fought with them. For the Countermarch he used, I make account it was the Macedonian himselfe being a Lacedæmonian. And he used it to meet the Thebans brantly in front. The same *Agessilaus*, after he had by him incamped in a peece of ground behind Mantinea encompassed about with mountaines, perceiving the next morning, that the Mantineans gathered together upon the toppes, that lay right over the head of his Reare-gard, determined to lead his Armie out of the place with all speed. Now if himselfe should lead, he feared the enemy would giue vpon his Reare. Therefore standing still, and turning his armes against the enemy, he commanded the last of the Phalange to march backe againe from the Reare, and made it by little, and little stronger. When the Phalange was thus doubled, he proceeded in that order into the *Champaigne*, & there againe reduced the depth of the armed foote to 9 or 10 men in euery file. This place of *Xenophon*, if it be not corrupted, is very obscure. And I cannot tell whether to take it for doubling of the front, or the Macedonian countermarch. The words make for a doubling. For *Xenophon* saith plainly, the Phalange was doubled. Besides he addeth, it was made by little and little stronger; which could not be done with a Countermarch. And that a deepe Phalange, or Hearfe, (such as this by the euenings march, and the straights it entred, seemeth to be) is made stronger by doubling the front, there is no question. On the other side, the straights, through which it was to passe, perswade me, it should be a Macedonian Countermarch. For in doubling the front the length still increaseth; & the manner is not to enlarge, but to extenuate the front, when an Armie is to be conveyed thorough a narrow place. And *Xenophon* saith expressly, that *Agessilaus* led it through the straights into the *Champaigne* in that order so which it was reduced last; & that in the Champion the depth of the Armed was lessened, and brought to 9 or 10; for there *Agessilaus* imbailed his Phalange to receive the enemy, if he would charge. And in a march through straight waies the front is commonly narrowed, and proportioned to the way; but in open ground the Phalange is againe brought to the full length. So that it seemeth the depth was much, before it came into the plaine; because in the plaine it was brought to 9 or 10 men, and therefore no doubling. Lastly *Agessilaus*, (and the front I doubt not of the Phalange with him) turned face to the enemy, before the Reare came up to him, which is done in no other motion than the Macedonian countermarch. In which all the File-leaders first turne about their faces toward the enemy, and then the whole battaile marcheth against the File-leaders, and placing themselves orderly behind them, turne their faces the same way, that they haue done before. Now where it is in *Xenophon*, that *Agessilaus* having gained the *Champaigne*, extended his Armie to 9 or 10 Targets; I suppose it is a fault to be in the number of 9; and that it ought to be read 8 or 10. To extend a Phalange is to draw it out in length, the length is the space betwixt the point of both wings. When he saith he extended it to

10, the meaning is he drew it out so farre in length that he left but 10 in depth. Ten is the decas, whereof I spoke before, and I haue likewise noted, that the Lacedæmonians for the most part, made the depth of their battaile 8. The number of 9, as all other ancient numbers, was reiected by the Tacticks, as unfit for doubling. So that mine opinion is that *Xenophon* at the first wrote 8 or 10, not 9 or 10, howsoever 9 be crept into the place of 8. But to returne to *Agessilaus*, admit he used doubling of ranks, or of the front in retiring out of the Mantinean straights, yet giue me leave to be of opinion, that the Macedonian Countermarch had bene the fittest motion for that purpose. For himselfe being thereby cast in the reare, he had both prevented the charge of the enemy (which he feared) and yet wounde better out of the straights, the long Herie, which still remained in the Macedonian Countermarch, being more proportionable to issue out of a narrow place, then a broad-fronted Phalange, which ariseth out of doubling the front.

3 The Persian is the Cretan or Chorean] This Countermarch is called the Persian, and Cretan, because it was used amongst the Persians and Cretans. And it was termed the Chorean also, of the similitude it had with the solemn Græcian dances upon stages; the company, that shewed themselves in such dances being called Chorus. Who in their daunces ordered themselves into files, and ranks, as souldiers doe in battaile; and moving forward to the brinke of the stage, when being straightened by the place, they could passe no further, they retired one through the ranks of the other, exceeding not the bounds of the place, as is done in this Countermarch. The other two kinds of Countermarch changed the ground, they had before. The Macedonian took the ground before the front; The Lacedæmonian the ground after the reare. The Chorean holdeth the same ground, & beginneth the motion with the File-leaders, who notwithstanding precede no further, then shifter, where the Bringers-up stood, their files following them; & euery souldier keeping the same distance, he had before the moving. The figure sheweth the manner of it. These Countermarches by file are to be made, when the enemy appeares in the reare, and cometh to charge vs. And they are made to the end, to bring our best men, that is the File-leaders, to the encounter. Vber cunctis uisum standi there is a caution to be held, that if the enemy be very neare, or so neare, that we cannot conveniently counter-march, before he come up to vs, we forbear, lest we fall into disorder, and in disorder be easily defeated. In which case the best remedy is to turne faces about, and so receive him. This is the Countermarch by file.

Xenoph. de
616. E.
See Test cap.
18. 39.

4 Countermarches by ranke are made] The ends of Countermarches by ranke are twofold in *Ælian*: one to strengthen the middle of the battailes, the other to strengthen the wings. If the strength of the enemies battaile, be most in the middle, reason of Warre would, that we should oppose our greatest strength against the middle. If in the wings against the wings. There is an other cause of strengthening the wings, namely if the enemy be ready to charge either of them: and this strength *Ælian* would haue giuen by the Countermarch of our best men into the wings. It shall not be from the purpose to make all plaine by an example or two. Herodotus reporteth, that before the battaile of Platæa betwixt the Græcians, and the Persians, it was agreed betwixt the Athenians, and Lacedæmonians, that where the Athenians had vanquished the Persians in the battaile of Marathon, and had lately slain Masiistis the Generall of the Persian horse; and by those encounters had good experience of the Persian manner of fight; and where the Lacedæmonians were imbailed in the right wing against the Persians, the Athenians in the left wing against the Thebans, and other Græcians, that tooke part with the Persians: they should change, and the Athenians haue the right wing, the Lacedæmonians the left.

The Tactics

beene done in the last example cited concerning Scipio and Afrubal. The manner of countermarch by ranke is contrary to the countermarch by file. In countermarch by file the motion was in the depth of the battaile, and either the front removed toward the reare, or the reare toward the front, and tooke one an others place. In this the motion is in length of the battaile flanke-wise; the wing either marching into the middle, or else cleave thorough to the other wing. In doing it the souldiers, that stand outermost in the flanke of the wing, must move first to the contrary wing, and the rest of every ranke severally follow them in order. The figure will shew the manner of the motion. Patritius utterly mislakes the countermarch by ranke, and groundeth himselfe upon a wrong principle, namely that in all Countermarches the File-leaders must march toward the reare, and the Bringers-up towards the front. And therefore in changing the wings into Sections, he makes the wings to fall off behind in the reare (the File-leaders wheeling about) and there to ioyne themselves as reare, as the middle Section will give leave, and the Sections falling backe likewise, to ioyne themselves to the flanke of them, that were the wings. Whereas the nature of this Evolution is clearely to leave the File-leaders in front, and Bringers-up in reare, as they were at first. And albeit the File-leaders then change their places, yet change they their place with none, but with File leaders, and the change is, but a change of hands, the right hand for the left, or the left hand for the right. For whereas the File-leaders of the right wing had before the right hand, now in countermarch by ranke, being transposed to the left wing, they have the left hand of all the rest of the File leaders; as likewise the Bringers-up of the other bringers-up.

The words of Command may be these,

For the Macedonian Countermarch by file.

File-leaders turne your faces about (to the right or left hand).

The rest of every File passe thorough in order one after another, and place your selves at your distances after your Leaders, turning your faces about, and so stand.

For the Lacedemonian Countermarch by file.

The first manner.

Bringers-up, turne your faces about (to the right or left hand.)

The rest turne your faces about and beginning at them, that are next to the Bringers-up, countermarch and place your selves in your distances before the Bringers-up, and one before an other till the File-leaders be first.

The second manner.

File-leaders, countermarch to the right or left hand, and let every mans file follow him, and keepe true distance.

For the Chorgan countermarch by file.

File-leaders, countermarch to the place of the Bringers-up, and stand, and let your files follow you keeping their distance.

For the Macedonian countermarch by ranke.

The right or left hand corner file, turne your faces to the right, or left hand.

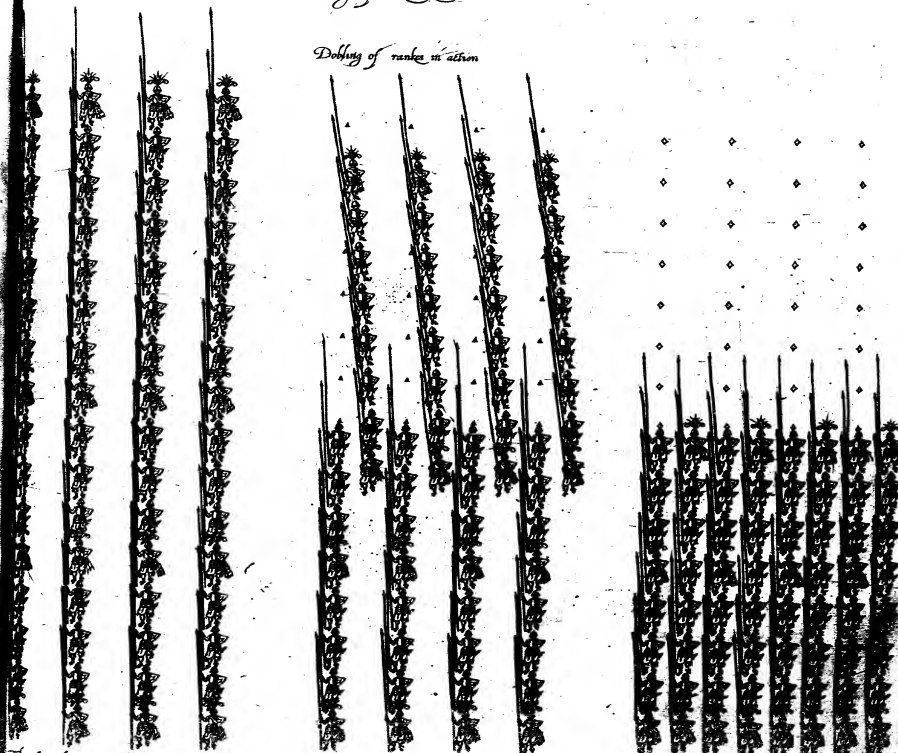
The rest of each ranke, passe thorough to the right, or left hand, and place your selves orderly behind your side-men keeping your distance.

For

Cap. 29

Dobling of Ranks

Dobling of ranks in action



The first before Dobling of ranks

The first after Dobling of Ranks

For the Lacedemonian countermarch by ranke.

The first manner.

The corner file, where the enemy appeareth, turne your faces to the right or left hand; The rest of ech rankes turne your faces, and passe thorough, (to the right or left hand) and place your selues before your side-men orderly keeping your distances.

The second manner.

The right or left wing, where the enemy appeareth not, countermarch to the contrary wing, and all in the Rank: follow every man his side-man: keeping your distance.

For the Chorzæan countermarch by ranke.

The uttermost corner file of the right, or left wing, countermarch into the place of the left or right wing, and stand. And the rest follow ranke-wise keeping their distance.

Of doubling, and the kindes thereof.

CHAP. XXIX.

THere are two kinds of doubling, one of *Rankes*, the other of *Depth*, of *files*: and either of these double the number, or the place. The length is doubled in number when of a front of 124 files we make a front (keeping the same ground) of 248 files, by inserting in the spaces betwixt file and file, some of the followers, that stood in the depth. This is done to the end to thicken the length of the battaile. If we list to recall them to their first posture, we are to command those, that were inserted, to countermarch to the place, they had before.

There are, that mislike these *doublings*, especially the enemy being at hand; and would have a shew of doubling made, without indeed doubling the *Phalange* already ordered, by stretching out the *light-armed*, and the *Horse*, on both sides of the wings of the Battaille. The use of doubling the length is, when either we would over-wing the enemy, or else our selues feare to be over-winged.

The *Depth* is doubled by inserting the second file into the first; so that the *Leader* of the second file be placed next behind the *Leader* of the first file, and the second man of the second file be the fourth man of the first file, and the third man of the second file be the sixth in the first file, and so forth the rest, till the whole second file be ingrossed into the first; and likewise the fourth file into the third, and all the even files into the odde.

Doubling of the *Depth* by *Countermarch* is made, either when the next *side files* in severall [as in the former example the second, and the fourth, and the rest of the even files] countermarch to the *Rear*, and place themselves behind the *Bringers-up* of the odde files; or else the files remayning in their first place, and number, halfe of them, diuiding themselves from the other halfe, countermarch likewise to the *Rear*, and conveying themselves behind the other, there order themselves, and so double the depth of the *Phalange*.

If we would returne them to the first posture, we must recall those, that were conveyed to stand behind, to the place they had before the *Countermarch*.

M

Notes

THE former three Motions alter not the forme of the Phalange. For whether you turned faces, wheeled, or counter-marched the Phalange, the depth and length remaine one. The motion to be expressed in this Chapter induceth an other shape to the Phalange, and maketh it seeme a different body from that it was before, being by Doubling extended either in length or in depth. For Doubling the number of men, or the place of the Phalange in front, maketh the length twice as much, and doubling the same in flanke maketh the depth double to that it was before. For Doubling is nothing else, then making a military body twice as long, or twice as deepe, as it was before.

1 There are two kinds of doubling. The Doublings are either of length or depth; Or (which is all one as Suidas saith) of ranks or files. For ranks stretch out in length, files in depth. And these againe are divided into two other kinds, the body being

2 Doubled in number or place. That which is here called number, is called elsewhere persons; or (by Suidas) men. It is called persons in the Insertion which is made to Aelian, I know not by whom in the precedent Chapter of Countermarches. Which because it lay thrust in betwixt the description of Countermarches, and nothing pertained to that argument, I neuer made doubt, was crept into the text. And I am rather confirm'd in my opinion, because I saw it noted with an Asteriske in that Aelian (being of Robortellus Edition) which the learned Blaise Casaubon had quoted, and purposed to set forth, if untimely death had not prevented him. I will here set downe the words, because they differ not much from Aelian, and may give some light to the manner of Doubling. It is to be understood (so are the words) that a Phalange is doubled in persons, or place, when we therefore take halfe the souldiers from the Depth, and making files of them, place them euen with the rest in length of the front, so that of 124 files we make 248, this is Doubling of persons. In like sort we double the place with 124 files (not increasing the number) but onely commanding some to turne to the Pike, some to the Target, till the Phalange be stretched out to a convenient length; as from 5 furlongs to 10. In the same manner is the depth doubled. For either one file is inserted into an other, man for man, so that the second File-leader becomes the follower of the first, and the second man in the second file, the follower of the second in the first file, and so the rest: Or else 16 men are so extended, that they hold as much ground in length, as 32 visually doe. So farre the insertion. It followeth in Aelian.

3 The length is doubled in number. When the front hath twice as many files, as it had before, this is Doubling in number, or in men, or in persons. For the person, or men, make the number in the files. And the files carrying an euen depth of men, and being doubled, double the number of the front, or length. Aelian speaketh but of one kind of doubling, namely of number, and that must be done in open order, as I said before. For the files of 16 standing in open order if you command the Middlemen (as we teeme them at this day, they were called in the Macedonian files the third Enomotaries) to double their ranks: These middle men with the hinder halfe file march up to the front, & so doubling the front in number leaue yet the same measure of length. The figure sheweth how it is done. Yet are there two other waies, when the Phalange standeth in close order, both which double the number, and place. One is when the Middlemen divide themselves, and one halfe with their followers turning their faces march out of the right flanke: The other of the left flanke of the Phalange. And then turning their faces againe,

fluece

fluece up and ioynne themselves in an euen line with the File leaders in front; The other when all the Middle turne their faces one way and march out with the followers beyond one flanke right or left; and turning faces againe fluece up to the front, and stand euen with the File-leaders. One of these is done, when we desire to enlarge both the wings of the Phalange; the other, when but one wing. Of these two last waies, I haue set downe no figure, because I finde them not expressed in Aelian. Polienus telleth the story thus: Cleandridas making warre vpon the Thracians, having halfe as many men againe, as they, conceiuing if they had intelligence hereof, they would hardly bee brought to fight, imbatailing his Phalange, stretched it out in depth. The Lucians therefore, contemning the small number, drew out their forces in length, with intent to ouer-front the enemy; which Cleandridas perceiving, commanded the followers to march up, and ranke with their Leaders, and by that meanes increased the length of his Phalange, and ouer-fronted the enemy; who being incompassed, and assailed with misse weapons on all hands, perished intirely, excepting a few, that saved themselves by shamefull flight. The words seeme obscure to a man not acquainted with the Tactics. There are two kinds of soldiers saith Aelian in a file, Leaders, and followers. All the Leaders are the oade of the file; as the first, the 3, the 5, the 7, and so forth: the followers are the euen, as the 2, 4, 6, 8. Those that are in the same ranke, are called side-men. Now, saith Polienus, Cleandridas willed the followers to step forward, and to ranke, and become side-men with their Leaders: that is, he willed the euen files to double their ranks with the odde; and so extenuated the depth, but increased the length of his Phalange; by which art he ouer-fronted, & inclosed the enemy on all sides. This way then to double ranks, or the length of the battaile, is to insert the euen ranks man by man into the oade. All the Doublings that haue beene rehearsed, were Doublings either in number alone, or else both in number, and place. For doubling of place alone nothing is said in Aelian. The Insertion I rectified, supplyeth this defect: saying, the place is doubled with 124 files, onely by commanding halfe to turne to the Pike, halfe to the Target, till the Phalange be stretched to a convenient length; as from 5 furlongs to ten; which is as much to say in few words, as to open the Phalange; Or to bring it from order, to open order. For so the front possesseth double ground, to that it had before.

4 The vse of Doubling the length is. Two causes are assigned for the Doubling of the length: 1 One to ouerwing the enemy, the other to auoide ouerwinging our selves. Cleandridas in the example above, performed both: For he both disappointed the Lucians that sought to incompass him, and besides incompassed, and inclosed them. The narrower the front is, it is the more in danger of ouer-fronting; & being drawne out in length it is freer from enclosing, because a greater compass must be touched, before it can be inclosed. Yet are we to take heed, that in doubling of the front, we giue it not so much length that it faile in depth. The want of length, or depth is alke dangerous, and giueth aduantage to the enemy. I haue touched before, and quoted Leo glancing onely at his words. Now I will set them downe as they lie: 4 When the thickness or depth of the Phalange (saith he) is gathered vp and made more thinnie, it becometh not so to lengthen it, that it become altogether weak and without depth. For it will lo come to passe, that the enemy shall easily cut it in peeces, and make a passage thorough it, and not onely seeke to incompass it before, but passing thorough the midst, bee found behinde, and there indamage it. And this it behooueth a Generall, not onely to take heede, hee suffer not himselfe, but also indoeuour to put vpon his enemy.

i Leo cap. 7.
69.

k Poly-m. l. b. 4
m Antic. o. 10.
5. 19.

Hitherto are the words of Leo: shewing the disadvantage of a battaile too much thinned by doubling the length. But ¹ Leo elsewhere addeth an other cause of doubling, namely to make inew a faire fight of the Armie. For the more ground it taketh in front, the more will the number appeare, and the braverie of every man in particular discovered. Further Antigonus ² used also this doubling for a policie to beguile his enemy. ³ Polien reporteth the fact thus: Antigonus incamped against Eumenes with an armie inferior in number. And when messengers were sent from one to another, Antigonus at the request of a messenger of the enemy, commanded one of his souldiers to come running in, as it were out of breath, and all to be filled with dust, and to bring newes that his Confederates were come. Antigonus hearing the newes, leaped for joy, and sent away the messenger. The next day he led his Armie out of his trench doubling the length of his front. When the enemy heard of their messenger the newes, that was brought to Antigonus concerning his Confederates, and saw the length of his battaile doubled, they imagined that the depth was answerable to the front. And therefore they dislodged being afraid to ioyne with him.

5 There are that mislike] *Counter-march, and Elians doublings of number, are dangerous to the enemy being ready to charge. Because the files of the Battaille must be kept in open Order till the motions be ended, which posture is not fit to receive the charge of the enemy, as we saw out of the eleventh Chapter. The other two doublings are done in close order, whereof I made mention a little before. The one dividing the middle men in halfe, and shewing them up by the battaile on both sides. The other shewing them upon one side which you will, may be used without danger, as well when the enemy is neare, as when the fight is: in as much, as they disturbe not the battaile, but advance fresh aides against the enemy on the flanks of it.*

6 By inserting the second file] *There are two manner of doublings of the depth or of files; one in number, the other in place. In number, when one file is inserted into another, the Leader or first man of the second file standing behind the Leader of the first; the second behind the second, the third behind the third, and so forth of the rest: Or when the even files counter-march, and their Leaders place themselves behind the Bringers-up of the odde, their files following them, or (which cometh all to one) the files being whole, they divide themselves into two parts in the front, and halfe counter-march, and place themselves in the Rear of the other file to file: albeit the two last are Doublings both in number and place, and not in place alone. The true Doubling of the place alone is not Elian. The Infection whereof I spake, remedeth this defect also. There it is said, that when 16 men (that is a file) are so extended, that they possesse as much length as 32 should doe, (that is, as 3 files) it is doubling of place, which is nothing else but changing of the Souldiers order into open order. For in their order they have 8 foote in depth, in their open order 96 foote in depth. In this Doubling of depth we must take heed that we make not the front of our Armie to narrow lest we give opportunity to the enemy to invade, and compass it. Polybius noteth this a great fault in Marcus Atilius Regulus, as such time as he fought with the Carthaginians, and was taken prisoner. His words have this effect: ⁴ The Romans seeing the enemy order his battaile marched out against him full of courage. Being notwithstanding somewhat appalled at, and foreseeing the Elephants violence in coming on, they set their Darters before, and placed many maniples of Armed behind, one after another, and divided the Horse halfe into one wing, halfe into the other. Then making the whole battaile shorter, but deeper, then they were wont, they provided well against the Elephants, but not against the Horse, that farre exceeded them*

II To l. b. 1.

in

in number. Being now come to hands the Roman horse overpressed with multitude of the Carthaginians quickly fled from either wing. But the foote of the left wing, partly avoyding the Elephants, partly concerning the Mercenaries, fell on, and charged the right wing of the Carthaginians, and putting it to flight, followed hard, and gave chase even to the trench. But of those, that were placed against the Elephants, the first sinking vnder the violence of the beasts, perished being overturned, and troden to death by heapes. The body of the battaile remained a while vnbroken by reason of the depth of them, that were after placed. But when the Rear of all, compassed by the horse, was forced to turne about, and fight with them; and the other that had by force made way thorough the middle of the Elephants, and were now behind their backs, came vp to the fresh Phalange of the Carthaginians, standing in good order, they were by them slaine. Thus fortune being contrary on all sides, the Romans for the most part were troden to death by the excessive might of the beasts, and therewith died with the darts of the horsemen in the place, where they fought. The error of Atilius Regulus was in ordering his battaile too deepe; by means whereof it was easily compassed, and distressed by the Carthaginian horse. ⁵ Appian likewise blameth Antiochus for ordering his Phalange 32 men in depth, where the Macedonian Phalange ought to but 16 deepe, ⁶ shewing that by that oversight it was compassed by the Romans, and overthrowne. I have touched the historie in my notes before. Many other examples might be alledged, but these two are sufficient for our purpose.

m Appian m.
synacta 107. B.

The words of Command in doubling of the length by number.

Middle men double your Ranks to the right, or left hand.

By this Command the middle men with their halfe files march up to the front, in the spaces betwixt the files, and stand even with the File-leaders, and the rest even with the rest of the Ranks.

Doubling of the length in place.

Stand in your open order.

One halfe openeth their files to the right hand, the other to the left, and stand six foote one from an other.

Doubling of the depth in number.

Double your files to the right or left hand.

The even files fall into the spaces of the odde files.

Double your files by counter-march to the right or left hand.

The even files counter-march, and fall behind the rear of the odde, and place themselves lineally after them, observing their first distances.

Divide your files and double them by counter-march to the right, or left hand.

Halfe the files divide themselves from the other halfe, and counter-march out behind the Rear, then turne their faces towards the place behind the Rear of the standing files, which remoued not, then march on, and place themselves orderly behind them file to file, then turne their faces, as at first.

Doubling the depth in place.

Ranks open behind to your open order.

M 3

The

The broad front'd Phalange, the deep Phalange, or Herse, and the vneuen-fronted Phalange.

CHAP. XXX.

P*lagiophalanz*, or the *broad-fronted Phalange*, is that, which hath the length much exceeding the depth.

Orthiophalanz, or the *deep Phalange* (commonly called the *Herse*) is that, which proceedeth by *wing* hauing the depth much exceeding the length. In generall speach euery thing is called *Paramches*, which hath length more then the depth; and that which hath the depth more, then the length, *Orthion*: and so likewise a *Phalange*.

The *Phalange Laxe*, or vneuen fronted, is that, which putteth forth one of the *wings* (which is thought fittest) toward the enemy, and with it beginning the *fight*, holdeth off the other in a convenient distance, till oportunitie bee to advance

Of Parembale, Protaxis, Epitaxis, Proflaxis, Eutaxis, & Hypotaxis.

CHAP. XXXI.

P*arembale*, or *infrision* is, when placing souldiers before we take off the hindmost, and ranke them within the distances of the first.

Protaxis, or *fore-fronting*, is when we place the *light-armed* before the *front* of the *armed*, and make them *fore-flanders*, as the *File-leaders* are.

When we place the *light-armed* behind, it is called *Epitaxis*, as it were an *after-placing*.

Proflaxis, or *adueyning* is, when to both flanks of the *battaile*, or to one flanke, some part of the hindmost is added, the front of them, that are added, lying euen with the front of the *battaile*; such addition is called *Proflaxis*.

Eutaxis, or *infrision*, is when it seemeth good to set the *light-armed* within the spaces of the files of the *Phalange* man to man.

Hypotaxis, or *Double-winging*, is when you bestow the *light-armed* vnder the wings of the *Phalange*, placing them in an embowed forme; so that the whole figure resembleth a three-fold gate, or doore.

How the motions of wheeling, double, and treble wheeling of the battaile are to be made.

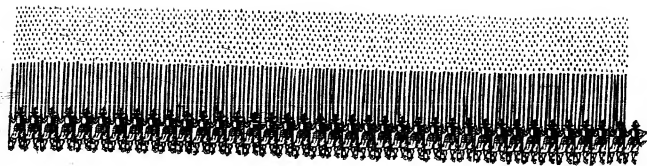
CHAP. XXXII.

IT followeth to shew how a *battaile* may be turned or wheeled, and how after reduced to the first posture, or *Station*.

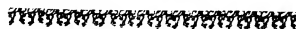
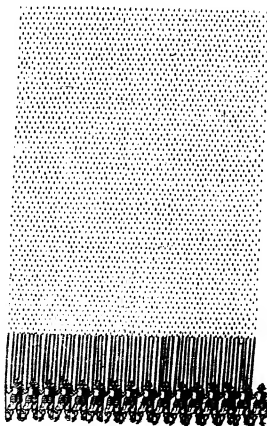
When therefore wee would accustom our *Troupes* to wheele the *battaile* to the

Plagiophalanz or the Brode-Fronted Phalange

Cap. 30.



Orthiophalanz or the Herse



Paramches, or fore-fronting

The Front

...or Horse, and the

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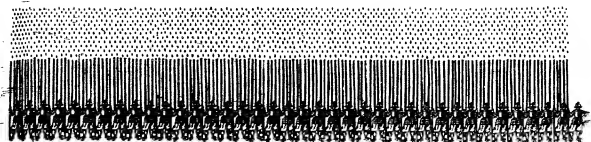
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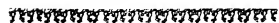
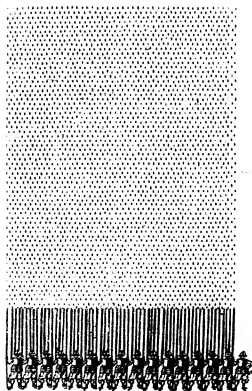
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*Phagopalanx or the Brute-fronted
Phalange*



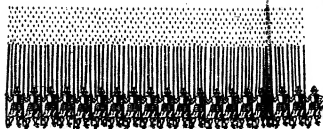
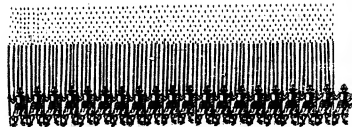
Orthopalanx or the Horse



Protesis or the fronting

Cap. 30.

*Leucopalanx or the uneven-fronted
Phalange*



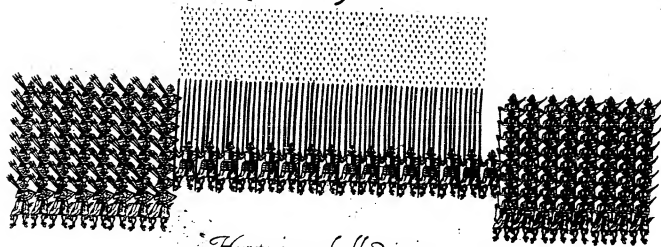
The Front

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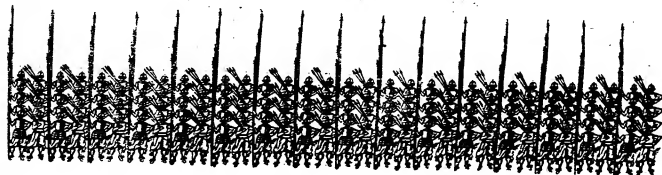
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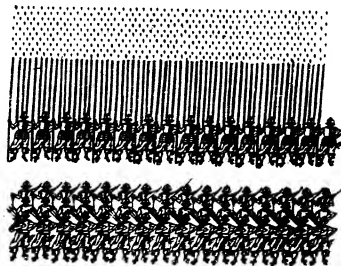
Cap. 31



Hypotaxis, or double-winging



Entaxis, or insertion



Proaxis, or forefronting

Cap. 32.

The manner of wheeling

The first posture

Closing of files



Closing of ranks forward



The Front

the right hand, we command the right-hand-file to stand firme, & the rest of the file to turne their faces to the right hand, and to moue close vp to the right hand file. Then to turne their faces, as they were at first: Then the hinder ranks to close forward: Then the whole battaile in that closeneſſe to wheele about the corner-file-Leader to the right hand. This done, if neede be to reduce it to the first posture, or Station, wee command euery man to turne about his face to the Target, or left hand (that is to looke the contrary way) Then to wheele about the body, that is, as it turned, closed, & terred with the front to the right hand so to returne it againe to the place, from whence it made the wheeling; Then the file-Leaders to stand firme, and the rest to open their ranks behind; Then to turn their faces about, as they stood at first; Then the right-hand-file to stand fast, and the rest turning faces to the left hand to open their files; Then to stand; And lastly to turne their faces againe to the right hand: and so shall euery man haue his first posture.

But in case we desire to wheele to the left hand, we command the left-hand-file to stand still, and all the rest to turne their faces to the left hand, and moue forward close vp to the left hand file; Then to turne their faces as they were; Then to gather vp the hinder ranks; Then to wheele the battaile to the left hand, and stand; and so is it done, that was commanded. But if restitution to the first posture be needfull, we must doe, as we did in returning from the right. For euery man must turne about his face to the Pike; Then the whole battaile wheeling about the left-hand-corner-file-Leader must returne to the place, it had; Then all the file-Leaders stand firme, and turne about their faces, and the rest open their ranks in mouing forward and make *Alte*; Then the left hand file is to stand firme (for it hath the place it first had) and the rest turning their faces to the right hand to open their files, and moue forward, till they haue recovered their first distances; then to turne their faces as at first; and so shall euery man be in his first posture. Now if we would wheele the battaile about, to the pike we are to make 2 wheelings to the same side, so will it come to passe that the file-Leaders shall in the change haue their faces turned to the Reare, where before they had them looking out from the front. But in restoring to the first posture we command it to wheele about to the right hand; That is, we giue it two wheelings more the same way; So the file-Leaders will haue their faces set, as at first. Then we command the file-Leaders to stand firme, and the rest to open their ranks behind; then to turne their faces about; Then the right hand file to stand still (for it hath the right place) and the rest turning their faces to the right hand to march on, till the former distances are regained; then to make *Alte*. So is the battaile reduced to the first Station.

If you would haue the battaile turne about to the Target, you are to giue contrarie directions; That is, in stead of commanding a double wheeling to the Pike, to command a double wheeling to the Target; Then by making two turnes the contrary way, to vsethe like changes, we spake of before.

There is likewise a treble wheeling of the battaile, when it turneth thrice to the same hand, namely to the Pike, or Target. The double wheeling to the Pike transferreth the Souldiers face from the front to the backe of the battaile: The treble wheeling to the Pike bringeth his face to the left flank. The treble wheeling to the Target contrariwise to the right flank.

The Tactics

Notes.

Before in the 26 Chapter Aelian discoursed of wheeling, and the kindes thereof. The manner, how it is to be done, is referred for this place, I neede not therefore remember any thing else, besides the words of command.

The words of command in Epistrophe.

*The uttermost file on the right or left hand stand firme
The rest turne faces (to the side purposed) and march up to the file standing firme.
Faces as you were.
Close your ranks forward:
Wheele the body (to the hand appointed) and when you haue your ground, stand.*

Returning to the first Posture, or Anastrophe.

*Faces to the right or left hand
Wheele backe the body to the ground, it first had.
File- Leaders stand firme: the other ranks open to their first place.
Faces about (to which hand you will)
The corner file (to which the turning was) stand firme, the rest open to their first ground.
Faces as you were, and order your Pikes.*

Perispasmos, or wheeling about.

*In wheeling about, the same wordes to close the files, and ranks, are to be used, which were used in Epistrophe, there remaineth no more, then to say
Wheele about your body, to the right, or left hand.*

Anastrophe or returning to the first Posture.

*Returne to your first Posture.
The same forme is used, that was held in the former returning unto the first posture for opening ranks and files.*

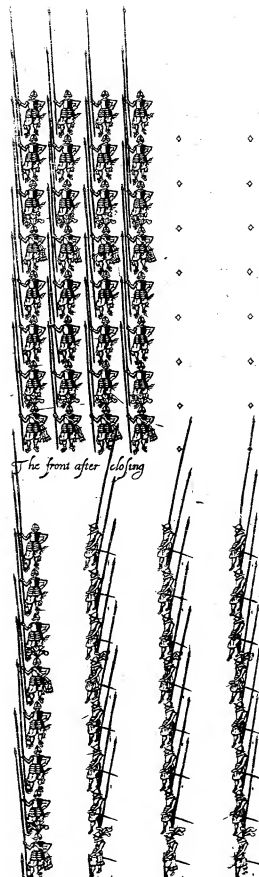
Eperispasmos, or treble wheeling.

In this motion the same consue is held, that was in the wheeling; But only that you command a treble wheeling. And the returning to the first Posture, or Anastrophe is all one, but for the same difference.

*Of closing the battail to the right, or left hand,
or to the middle.*

C H A P. XXXIII.

IF we would close, or thicken the Phalange in the right wing, we are to command the right-wing-corner-file to stand still, and the rest turning faces to the Pike to aduance toward the right hand; Then to set their faces as they were, and to gather vp the ranks behinde. In reducing them to the first posture we are to command the file-Leaders to stand, and the rest turning about their faces to open their



*Closing to the right
and in action*

*Closing to the right
and in action*

Closing to the middle

*Closing to the
left hand*

The Tactics

Notes.

Before in the 26 Chapter Elian discoursed of wheeling, and the kindes thereof. The manner, how it is to be done, is referred for this place, I neede not therefore remember any thing else, besides the words of command.

The words of command in Epistrophe.

The uttermost file on the right or left hand stand firme
The rest turne faces (to the side purposed) and march up to the file standing firme.

Faces as you were.

Close your ranks forward:

Wheele the body (to the hand appointed) and when you have your ground, stand.

Returning to the first Posture, or Anastrophic.

Faces to the right or left hand

Wheele backe the body to the ground, in first had.

File- Leaders stand firme: the other ranks open to their first place.

Faces about (to which hand you will)

The corner file (to which the turning was) stand firme, the rest open to their first ground.

Faces as you were, and order your Pikes.

Peripasma, or wheeling about.

In wheeling about, the same words to close the files, and ranks, are to be used, which were used in Epistrophe, there remains no more, then to say
Wheele about your body, to the right, or left hand.

Anastrophic or returning to the first Posture.

Returne to your first Posture.

The same forme is used, that was held in the former returning unto the first posture for opening ranks and files.

Eperipasma, or treble wheeling.

In this motion the same course is held, that was in the wheeling; But only that you command a treble wheeling. And the returning to the first Posture, or Anastrophic is all one, but for the same difference.

Of closing the battaile to the right, or left hand,
or to the middle.

CHAP. XXXIII.

If we would close, or thicken the Phalange in the right wing, we are to command the right-wing-corner-file to stand still, and the rest turning faces to the Pike to advance toward the right hand; Then to set their faces as they were, and to gather up the ranks behinde. In reducing them to the first posture we are to command the file-Leaders to stand, and the rest turning about their faces to open their



The front after closing

Closing to the right
and in action

Closing to the
right hand

Closing to the middle



Closing to the
left hand

Closing to the
right hand



*They march up to the place appointed, and march up to the first hand, or this
 Face as you were.*

*Close your ranks forward:
 Wheel the body (to the hand appointed) and when you have your ground, stand.*

Returning to the first Posture, or Anastrophe.

Faces to the right or left hand

Wheel back the body to the ground, at first had.

File- Leaders stand firme: the other ranks open to their first place.

Faces about (to which hand you wish)

The corner file (to which the turning was) stand firme, the rest open to their first ground.

Faces as you were, and order your Pike.

Petitpasmos, or wheeling about.

*In wheeling about, the same wordes to close the files, and ranks, are to be
 used, which were used in Epistrophe, there remaineth no more, then to say
 Wheel about your body, to the right, or left hand.*

Anastrophe or returning to the first Posture.

Returne to your first Posture.

*The same forme is used, that was held in the former returning unto the first
 posture for opening ranks and files.*

Expetitpasmos, or treble wheeling.

*In this motion the same course is held, that was in the wheeling; But only that
 you command a treble wheeling. And the returning to the first Posture, or
 Anastrophe is all one, but for the same difference.*

*Of closing the battaile to the right, or left hand,
 or to the middle.*

CHAP. XXXIII.

IF we would close, or thicken the Phalange in the right wing, we are to command
 the right-wing, corner-file to stand still, and the rest turning faces to the Pike to
 advance toward the right hand; Then to set their faces as they were, and to ge-
 ther vp the ranks behinde. In reducing them to the first posture we are to com-
 mand the file-Leaders to stand, and the rest turning about their faces to open
 their

The front after closing

*Coming to the right
 and in action*

*Closing to the
 left hand*

*Closing to the
 right hand*

The front before closing

The front before closing

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mand the file-Leaders to stand, and the rest turning about their faces to open their

of *Ælian*.

their ranks behind; Then to turne their faces as they were; Then the right-wing, corner-file to stand (for it hath the right place already) and the rest proceeding on to the Target to follow their Leaders, and observing their distances to turne their faces as at first. A contrarie course is to be held in thickning the *Phalange* to the left wing.

If the *Phalange* be to be closed in the midst, the *Diphlange* on the right hand must turne their faces toward the Target, and the *Diphlange* on the left hand their faces toward the Pike; Then move forward toward the midst of the *Phalange*; Then, after their true distance gained, to set their faces, as they were, and to gather up the Ranks behind.

When we would reduce the *Phalange* to the first posture, we command to turne faces about; then to open the Ranks, and all to move on, but the first Rank; then to turne their faces againe, and the right *Diphlange* turning to the Pike, and the left *Diphlange* to the Target to follow their Leaders, till they have recovered their first distances. Then to set their faces, as they were.

This rule is to be observed in all turnings about of faces, when they are made out of closings, that the Pikes be advanced, least they hinder the Souldier in making his turning.

The light-armed are to be taught, and exercised after the same manner.

Notes.

In the 11 Chapter the distances, that ought to be betwixt souldier and souldier, are particularly treated of. This Chapter sheweth, how they are to be gained, that is, how we are to proceede out of one distance into another. And because the open order is it, that is commonly begunne withall, it is here taught how from thence to passe to the rest, and to returne to it againe. The end of closings is spoken of before. In regard of place they are said to be of two kinds: One to the wing (right or left) the other to the middle of the *Phalange*. I cannot expresse the manner better, then by setting downe the wordes of command, or direction, which are these in

Closing to the right wing.

The right-wing, corner-file stand firme

The rest turne faces to the Pike, and move (according to the distance required) to the right hand.

Faces, as you were.

Close your binder ranks forward, and order your Pikes.

Restoring to the first posture.

File-Leaders stand firme.

The other Ranks, turne faces about, and open behinde to the first distance.

Faces as you were.

The right-wing, corner-file stand firme; the rest turne faces to the Target, and proceede to your first distance.

Faces as you were; and order your Pikes.

Closing to the left wing.

It differeth not from the other, but that the moving is to the contrarie hand.

Closing

The first ranke stand firme.

The right turnes faces about, and open the rankes to the first distance.

Faces as you were.

The files meet the middle section stand fast, and the right wing turne faces to the target, the left to the Pike, and move on till the first distance recovered.

Faces as you were, and order the Pikes.

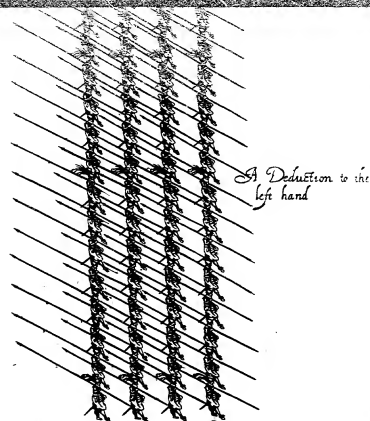
We may not forget Elians generall rule for turning of faces out of Closings, that the Pikes be alwaies advanced. For when you come up to the closings required, the Pike upon the shoulder will hardly admit turning of the face. The like falleth out when you would open from the Closing.

The use, and advantage of these exercises
of armes.

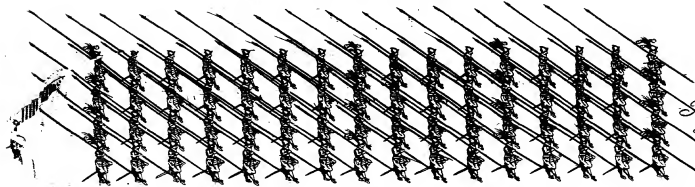
CHAP. XXXIV.

These precepts of turning about of faces, of wheeling, and double wheeling of the Battaille, and of reducing it to the first posture, are of great use in suddaine approaches of the enemy, whether hee shew himselfe on the right, or left hand, or in front, or in the reare of our march. The like may bee said of *Counter-marches*; Of which, the *Macedonians* are held to bee the inventors of the *Macedonians*; the *Lacedemonians* of the *Lacedemonian*; and for this cause either to haue name accordingly. The Histories witnesse, that *Philip* (who much enlarged the *Macedonian* kingdome, and overcame the *Gracians* in battaile at *Cheronea*, and made himselfe Generall of *Greece*) and likewise his sonne *Alexander* (that in short time conquered all *Asia*) made small account of the *Macedonian* countermarch, vntil hee necessitie forced it; and that they both by the use of the *Lacedemonian* became victorious ouer their enemies. For the *Macedonian* countermarch the enemy falling vpon the reate, is cause of great confusion; in as much as the hindermost dismarching toward the front, and making a shew of running away, it more encourageth, and emboldneth the enemy to follow. For feare, and pursuit of the enemy [ordinarily] accompanieth that kinde of *countermarch*. But the *Lacedemonian* is of contrarie effect. For when the enemy sheweth himselfe in the reare, the Leaders with their followers brauely aduancing, and opposing themselves, it striketh no small feare, and terror into their minds.

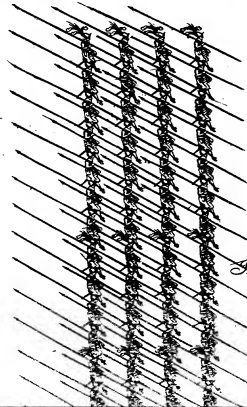
CHAP.



A Deduction to the
left hand



A right reduction
The Front



A Deduction to the
right hand

*Of the signes of direction, that are to be given to the
armie, and their severall kindes.*

CHAP. XXXV.

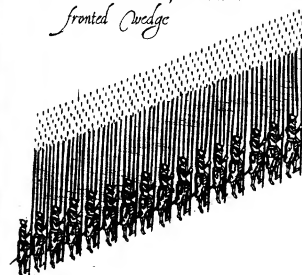
WE are to acquaint our forces both foote, and horse, partly with the voice, and partly with visible signes, that whatsoever is fitting be executed, and done, as occasion shall require. Some things also are to be denounced by the Trumpet, for so all directions will be fully accomplished, and sort to a desired effect. The signes therefore, which are deliuered by voice, are most euident, and cleere, if they haue no impediment. But the most certaine, and least tumultuous are such, as are presented to the eye, if they bee not obscured. The voice

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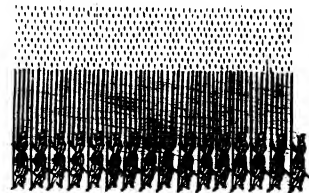
Pl. C.

Cap. 36.

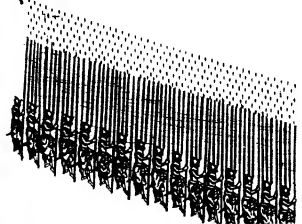
*The Coelembolos, or hollow.
fronted Wedge*



The right Induction



The front



*Of the signes of direction, that are to be given to the
armie, and their severall kindees.*

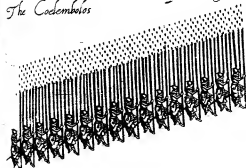
CHAP. XXXV.

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one are such, as are presented to the eye, if there be no impediment, &c.

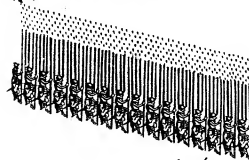
Cap. 36.

The Cocolombos

The left wing

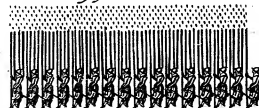


The front

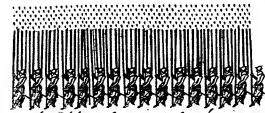
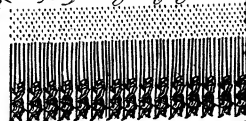


The right wing

*The Phalange set against the left wing
of the Cocolombos*



The forbearing Phalange



*The Phalange set against the right wing
of the Cocolombos*

*Of the signes of direction, that are to be given to the
armie, and their severall kinde.*

CHAP. XXXV.

WE are to acquaint our forces both foote, and horse, partly with the voice, and partly with visible signes, that whatsoever is fitting be executed, and done, as occasion shall require. Some things also are to be denounced by the Trumpet, for so all directions will be fully accomplished, and sort to a desired effect.

The signes therefore, which are delivered by voice, are most euident, and cleere, if they haue no impediment. But the most certaine, and least tumultuous, are such, as are presented to the eye, if they bee not obscured. The voice sometime can hardly be heard by reason of the clashing of armour, or trampling, and neighing of Horses, or tumult of cariage, or noyle, and confused sounds of the multitude. The visible signes also become many waies incertain, by thicknes of aire, and dust, or raine, or snow, or sun-shine, or else thorow ground, that is vneuen, or full of trees, or of turnings. And sometimes it will not be easie to find out signes for all vses, occasions effsoones presenting new matter, to the which a man is not accustomed. Yet can it not fall out, that either by voice, or by signal, we should not giue certaine and sure direction.

*Of marching, and of diuers kinde of Battales fit for a March: And
first of the right-induction, of the Coelembolos, and
the Triphalange to be opposed against it,*

CHAP. XXXVI.

BEING now to speake of *marshing* I will first giue to vnderstand, that some kind of *marsh* is a *Right-induction*, other some a *Deduction* on the right, or left hand; And that in a *single*, or *double*, or *treble*, or *quadruple-sided-battaille*. In a *single*, when one enemy is feated; in a *double*, when two; in a *treble*, when three; in a *quadruple*, when the enemy purposeth to giue on on all sides. Therefore the *marsh* is vnderaken sometimes in a *single Phalange*, sometimes in a twofold *Phalange*, or else in a threefold *Phalange*, or in a fourfold *Phalange*.

A *right-induction* is, when one body of the same kinde followeth another; as if a *Xenagly* lead, and the rest follow *Xenagly*-wise. Or a *Tetrarchy* lead, and the rest follow according to that forme. It is so called, when the *marsh* stretcheth it selfe out into a wing hauing the *Depth* much exceeding the length.

Against it is opposed the * *Coelembolos*, which is framed, when the *Antistomos* * Il. Lion
* *Diphallange* disposeth the Leading-wings, closing the *Rear* in manner of the * Wedge.
letter V: as the figure after placed doth teach, In which the *front* is disseuered, & * Double
the *reare* ioyned, and knit together. * Phalange.

For the *Right-induction* pointing at the midst of the enemies battaile, the *Coelembolos* quickly opening before serueth both to frustrate the charge of the *front*, and to claspe in, and circumuent the *flanks* of the *right-induction*. Further-

The Tactics

Furthermore a *Triphalange* is to be set against the *Calembolos*, one *Phalange* fighting against one wing of the *Calembolos*; The second against the other, and the middle, and third for bearing, and expecting a time fit to charge.

Of Parage, or Deduction.

CHAP. XXXVII.

Parage, or *Deduction* is, when the *Phalange* proceedeth in a wing not by file, but by rank, having the Commanders, or *file-Leaders*, either on the right hand, which is called a *right-hand-Deduction*, or on the left hand, which is called a *left-hand-Deduction*. For the *Phalange* marcheth in a *double*, *treble*, or *quadruple-side* according to the place, and part, it is suspected, the enemy will give on. And both the *Parages* beginning the fight in flanke doe make the length double to the depth. This forme of fight was devised to teach a Souldier to receive heedfully the charge of the enemy not only in front, but also in flanke.

Of the Phalange Amphistomus.

CHAP. XXXVIII.

* Double fronted Phalange.

The *Phalange* * *Amphistomus* (for it is so called, because it hath two fronts, and that part of the battale, that is set, and advanced against the enemy, is called a front) Seeing then in this forme the middlemost are ordered back to backe, and those in front and *reare* make head against the enemy, the one being Commanders of the front, the other of the reare, therefore it is called *Amphistomus*. It is of great use against an enemy strong in Horse, and able to give a hot, and dangerous charge; and principally practised against those *Barbarians*, that inhabit about the river *Ister*, whom they also call * *Amphippi* because they change Horses in fight.

* Amphistomus is set off two horses, one before, the other being ready upon.

The Horse battaile to encounter this forme hath a *Tetragonall* shape, being for the purpose divided into two *broad-squares* (they are *broad-squares*, that have the front twice as much as the depth) And these *Squares* are opposed severally against the divisions of the foot-battaile.

Of the Phalange Antistomus.

CHAP. XXXIX.

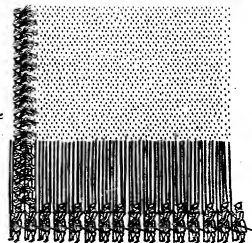
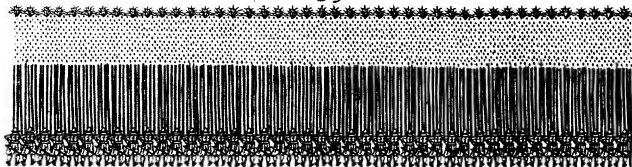
* Double flanked Phalange.

The *Phalange* * *Antistomus* is like the *Amphistomus* the forme being a little altered, so that it accustometh the souldier to resist the severall kinds of incursions of Horse. All that hath bene spoken concerning the former *Phalange* both for foote, and Horse agreeth with this figure also. Herein they differ, that

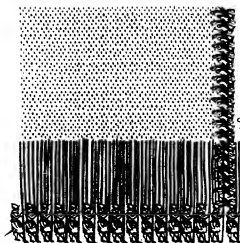
Cap. 37.

A four fronted Phalange against all attempts of the Enemy

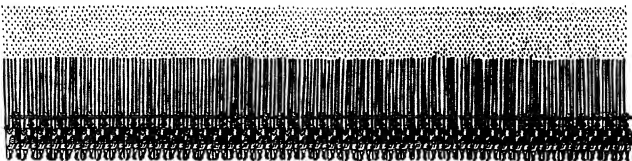
The Front of y^e reare



The Front of y^e right flank



The Front of y^e left flank



The Front of the March

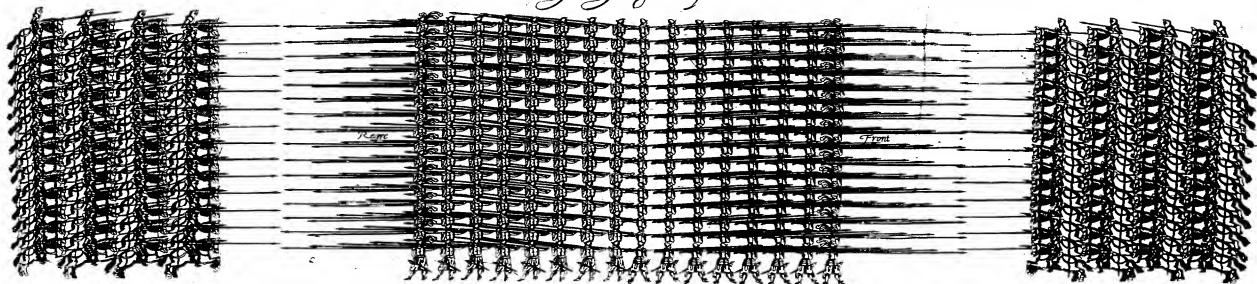
Of Ælian.

145

the *Amphistomus* receiveth the charge in front, and reare, the *Antistomus* in flanke But as well in the one, as the other, they fight with long Pikes, as doe the *Alans*, and *Sarmatians*. And the one halfe of the souldiers in the files turne their faces forward, the other halfe backward, so that they stand back to backe. This forme hath two fronts, the one before, where the file Leaders, the other behind, where the back-Commanders stand. And being also diuided into a *Diphalange* it maketh the fore-front with the one, and the alter-front with the other *Phalange*.

Of the *Diphalange Antistomus*.

Cap. 38.
The *Diphalange Amphistomus*



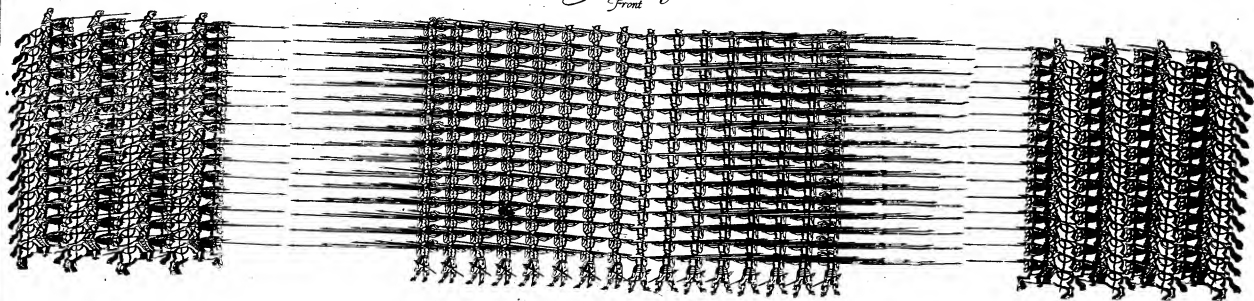
Of Ælian.

45

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Of the *Diphalange Antistomus*.

Cap. 39
The *Phalange Antistomus*
Front



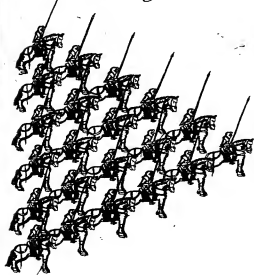
Of Ælian.

45

the *Amphistomus* receiveth the charge in front, and reare, the *Antistomus* in flanke. But as well in the one, as the other, they fight with long Pikes, as doe the *Alans*, and *Sarmatians*. And the one halfe of theouldiers in the files turne their faces forward, the other halfe backward, so that they stand back to backe. This forme hath two fronts, the one before, where the file Leaders, the other behind, where the back-Commanders stand. And being also diuided into a *Diphalange* it maketh the fore-front with the one, and the alter-front with the other *Phalange*.

Of the *Diphalange* Antistomus.

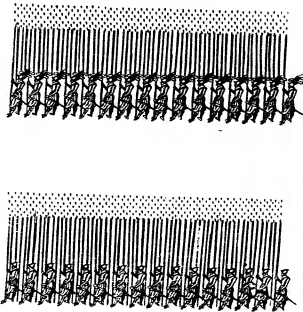
The *Hormans* Wedge



Front

Cap. 40.

A *Diphalange* Antistomus



* *Treble Phalange.*

* *Double Phalange.*

* *Horsemen that use two horses, one before, the other behind, den upon.*

* *Double Ranked Phalange.*

Of Ælian.

the *Amphistomus* receiveth the charge in front, and reare, the *Antistomus* in flanke But aswell in the one, as the other, they fight with long Pikes, as doe the *Alani*, and *Sarmatians*. And the one halfe of the souldiers in the files turne their faces forward, the other halfe backward; so that they stand back to backe. This forme hath two fronts, the one before, where the file Leaders, the other behind, where the back-Commanders stand. And being also diuided into a *Diphallange* it maketh the fore-front with the one, and the after-front with the other *Phalange*.

Of the Diphallange Antistomus.

CHAP. XL.

A *Diphallange Antistomus* is that, which hath the file-Leaders placed not in *Deduction* outwardly, but inwardly face to face one against another, and the reare-Commanders without, one halfe in a right, the other in a left-hand *Deduction*.

This forme is used when the Horse giue on and charge *Wedge*-wise. For the *Wedge* shooting forth into a point, and hauing the Commanders following in flanke, and endeavouring to disseuer, and breake the front of the foote, the Leaders of the foote, foreseeing their purpose, place themselves in the midst with intent either to repulse them, or else to giue them a thorough passage without losse. For the *Wedge* thrust vpon the foote in hope to charge the multitude in the midst, and to disorder the whole battaile: And the foote Commanders conceiuing well the fury of that kinde of forme, leaue a little space betwixt either front, and stand like walles on both sides, and jointly turning their faces toward the midst, giue them a fruitlesse, and empty passage.

This forme of Horse-battaile is called a *Wedge* by *Tallicks*, which was inuented by Philip King of *Macedon*, who placed his best men before, that by them the weaker fort might be held in, and enabled to the charge: as we see in a speare, or in a sword, the point whereof by reason of the sharpnesse quickly piercing maketh way for, and letteth in the middle blunt iron.

Of the Diphallange called Peristomus.

CHAP. XLI.

THE *Phalange* of the *Diphallange** *Peristomus* proceedeth by *deduction* in a wing, the oblique *deduction* on the right hand hauing the file-Leaders without, the left hand oblique *deduction* the reare-Commanders within. The figure sheweth the intent of them that fight so ordered. For the battaile going to charge, hauing bene at first *Tetragonall*, diuideth it selfe into two oblique wings (the right, and the left) of purpose to enclose the aduers *square-battaile*. And they fearing to bee inclosed transforme themselves into two seuerall marching *Phalanges* directing one against the right, the other against the left wing. Therefore it is called *Peristomus*, as hauing the front bent against the enemy both waies.

N

A

Of the *Diphalange* called *Homoioistomos*, and
of the *Plinthium*.

CHAP. XLII.

A *Diphalange* * *Homoioistomos* is so named because a whole file (that is 16 men) moving by it selfe, another file followeth it. And it is therefore called *Homoioistomos*, because they that follow follow in a like figure.

This kinde is opposed against the *Plinthium*. * *Plinthium* is a forme of Battaille, that hath the sides equall both in figure and number. In figure because the distances are every where equall; In number because there are as many men in length, as in depth. In this *four-sided-Battaille* are none in the flanks, but armed, without Archer, or Slinger to helpe. When therefore two *Phalanges* march together, one by another, and both have their Leaders either in a right-hand, or left-hand *Deduction* it is called a *Diphalange Homoioistomos*.

Of the *Diphalange Heteroistomos*.

CHAP. XLIII.

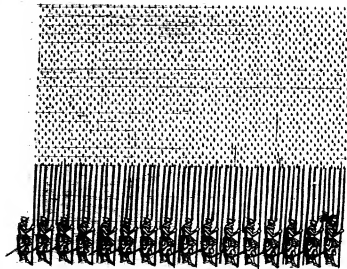
A *Diphalange* * *Heteroistomos* is that, which proceedeth by *Deduction*, having the Leaders of the former *Phalange* in a *right-hand-Deduction*, and of the following *Phalange* in a *left-hand-Deduction*: so that the battailes march counter-changeably, one having the Leaders in one flank, and the other in the other: and so the rest.

Again of the Battaille called a *Rhomb*, and of the
foote-halfe moone to encounter it.

CHAP. XLIV.

*T*He battaille framed in forme of a *Rhomb*, was first inuented by *Ileon* the *Thessalian*, and was called *Ile* after his name; and to this forme he exercised and accustomed the *Thessalians*. It is of good vse, in that it hath a Leader at every corner, at the point the Captaine, of the Troupe, the reare-Commander behinde, and on either side the flank-commanders. The foote battaille, fittest to affront this, is the *Menoides*, or *Crescent*, having both the wings stretched out, and in them the Leaders, and the middest imbowed to inuiron and wrap in the Horsemen in their giuing on. Whereupon the Horsemen ply the foot a fare off with flying weapons, after the manner of the *Tarentines*, seeking thereby to disfolue, and disorder their circled frame of marching. *Tarentum* is a City of *Italy*, the Horsemen whereof are called *Acrobolists*, because in charging they first cast little *Darts*, and after come to hands with the enemy.

of

The Battaille called *Plinthium*

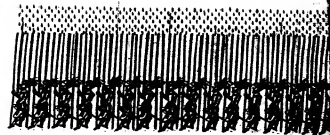
The front



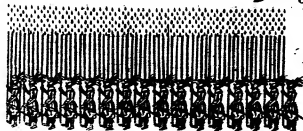
The front

Cap. 42.

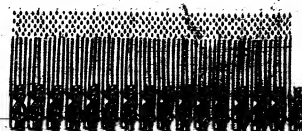
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Cap. 43.

The *Diphalange Heteroistomos*

The leaders



The bringers

The Tactics

*of the Diphlange called Homoioſtomes, and
of the Plinthium.*

CHAP. XLII.

Hemiofilum is so named because a whole file (that is 16 men) by itself, another file follow it. And it is therefore called because they that follow, follow in a like figure.

I opposed against the figure and number. In figure because the different equal sides, in number because there are as many men in length, as in breadth, in figure and number, I will give you this figure:

This figure-fide-Battail are none in the flanks, but all in the front, one after to helpe. When therefore two Phalanges be at together, one on both have their Leaders either in a right-hand, or left-hand Dealed a Diphalange Hemiofilum.

Of the Diphalange Heterostomus.

СН К Р. XLIII.

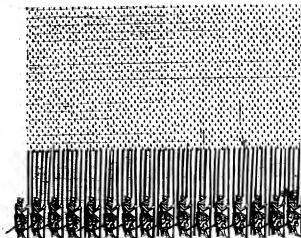
page * *Heterostomus* is that, which proceedeth by *Deduction*, having
 ders of the former *Phalange* in a *right-hand-Deduction*, and of the fol-
 lowe in a *left-hand-Deduction*: so that the *barrailes* march counter-
 one having the *Leaders* in one *flanke*, and the other in the other:

*Againe of the Battaille called a Rhombe, and of the
foote-halfe moone to encounter it.*

СНАР. XLIV.

tail framed in forme of a *Rhombe*, was first inuenced by *Ileon the*
Ionian, and was called *ile* after his name; and this forme he exercised
among the *Theffians*. It is of good use, in that it hath a Leader at eue
at the point the Captaine, and the Captaine, thereare Commander be-
tween either side the flane commanders. The foote battaile, stifted to
the *Attien* and *Creffian*, having both the wings stretched out,
and the middle imbowed to inuiron and wrap in the
in their giuing on. Whereupon the Horsemen ply the foot a farr off
with weapons, after the manner of the *Tarentines*, seeking there to
disorder their circled frame of marching. *Tarentum* is a City of *Italy*,
whence whereof are called *Acoroboliti*, because in charging they first cast
stones, and after come to hands with the enemy.

The Battaille called Plinthium



The front

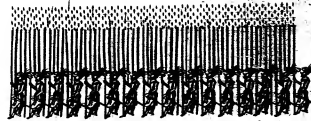
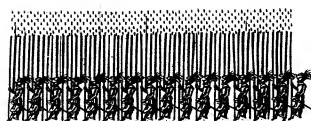


The front



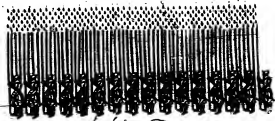
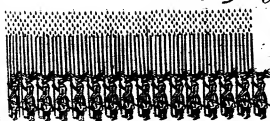
Cap. 42

The Diphalange Homioionomus



Cap. 43

The Diphalange Heterostomus



- The leaders

✓ The bringer

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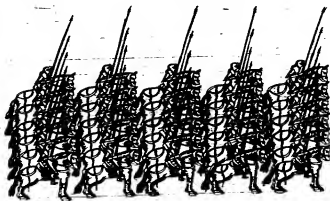
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Cap 45

Plagiophalanx, or of broad fronted
battale of foot



Hieromachia, or of Horse of Horse



The front

A line
fronted
long

A line
battall
of min
ground

A line
large in
every ft

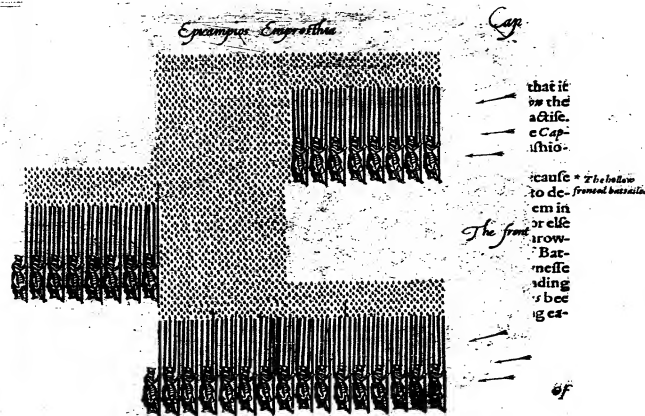
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Of the Horse-bataille Heteromekes, and of the
Plagiophalange to be opposed against it.

CHAP. XLV.

THE Horse-bataille * *Heteromekes* is that, which hath the *depth* double to the *length*. It is profitable in many respects. For seeming to cary but few in so small a breadth it deceiveth the enemy, and it easily breaketh his forces with the thicknesse, and strength of the embattailing, and may without perceiuing, bee lead thorough straight, and narrow passages.

The Foot-bataille to encounter it is called the *Plagiophalange*, or *broad-fronted* Bataille. For being but slender in *depth* it beareth forth and extendeth it selfe in *length*; so that, albeit it be broken in the middelt with the charge of the Horse; yet is nothing broken, but a little of the *depth*; and the fury of the Horse is carried not vpon the multitude of the foote, but straight, and immediately, into the open field. And for that cause is the *length* thereof much exceeding the *depth*.



Of the Horse-bataile Heteromekes, and of the
Plagiophalange to be oppos'd against it.

CHAP. XLV.

THe Horse bataile * *Heteromekes* is that, which hath the *depth* double to the *length*. It is profitable in many respects. For seeming to cary but few in so small a bredth it deceueth the enemy, and it easily breaketh his forces with the thicknesse, and strength of the embattailing, and may without perceiuing, bee lead thorough straight, and narrow passages.

The Foote-bataile to encounter it is called the *Plagiophalange*, or *broad-fronted* Bataile. For being but slender in *depth* it beareth forth and extendeth it selfe in *length*; so that, albeit it be broken in the middelt with the charge of the Horse; yet is nothing broken, but a little of the *depth*; and the fury of the Horse is carried not vpon the multitude of the Foote, but straight, and immediately, into the open field. And for that cause is the *length* thereof much exceeding the *depth*.

Of another kinde of Rhombe for Horsemen, and of the
foote-Bataile Epicampios Emprothia to
encounter it.

CHAP. XLVI.

ANother sort of *Rhomboides* there is, whereof I need say no more, but that it fileth, and ranketh not. For I haue before shewed the vse, and that *Neon* the *Thessalian* was the inuentor, and that *Ision M-deas* husband most put it in practise. The vse thereof is great being directed, and lead, in the foure corners by the *Captaine*, the *Lieutenant*, and the two flanke-Commanders. It is commonly fashion of Archers on Horsebacke, as the *Armenian*, and *Persian* manner is.

Against it is opposed the foote-bataile called * *Epicampios Emprothia*, because * *The Thessalon* the *circumduction of the front* is like an embowling. The end of this forme is to *des-fronted bataile* ceue and ouer-reach the Archers on Horsebacke either by wrapping them in the void space of the front, as they charge, and giue on vpon the spurre, or else disordering them first with their wings, and breaking their fury, by ouerthrowing them finally with their ranks about the middle *Engages*. This kinde of Bataile was devised to entrappe and beguile. For opening the middle hollownesse it maketh shew but of a few, that march in the *wings*, hauing notwithstanding thrice as many following, and seconding, in the reare. So that, if the *wings* bee of power sufficient for the encounter, there needeth no more; if not, retiring easily on either side, they are to ioine themselues to the buike of the Bataile.

The Tactics

Of the foot-bataile called *Cyrtte*, which is to be set
against the *Epicampios*.

CHAP. XLVII.

* *Tetragonall
bataile.*

THE Bataile to be opposed against the *Epicampios* is called * *Cyrtte* of the circumference forme. This also maketh semblance of small forces by reason of the conuexitie of the figure. For all round things appeare little in compasse; and yet stretched out in length, and singled, they prove twice as much, as they appeare to be: as is euident in pillars, which are round; and therefore in fight the one halfe, and conceale the other.

The greatest piece of skill in embattailing, is to make a shew of few men to the enemy, and indeed to bring twice as many to fight.

Of the *Tetragonall Horse-bataile* and of the *wedge*
of foote to be opposed against it.

CHAP. XLVIII.

* *Square.*

THE * *Tetragonall Horsebataile* is square in figure, but not in number of men. For in *Squares* the number is not alwaies the same; and the Generall for his advantage may double the length to the depth. The *Persians*, *Stellians*, and most of the *Gracians* doe affect this forme, and take it to bee easie in framing, and better in use.

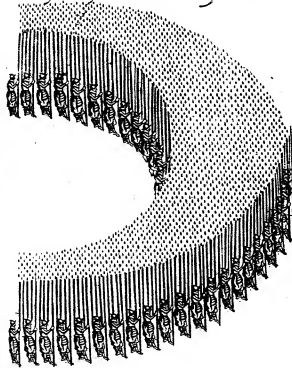
* *Wedge.*

Against it is opposed the *Phalange* called * *Emboles*, or *Wedge* of foote, all the sides consisting of armed men. This kinde is borrow'd of the *Horse-mans wedge*. And yet in the *Horse-wedge*, one sufficeth to lead in front, where the Foote-wedge must haue three, one being vnable to beare the sway of the encounter. So *Epaminondas* the *Theban* fighting with the *Lacedemonians* at *Mantineia*, overthrew a mightie power of theirs by casting his armie into a *Wedge*. It is fashioned if the *Antistomus Diphalangy* in marching ioyne the front of the wings together, holding them open behind like vnto the letter A.

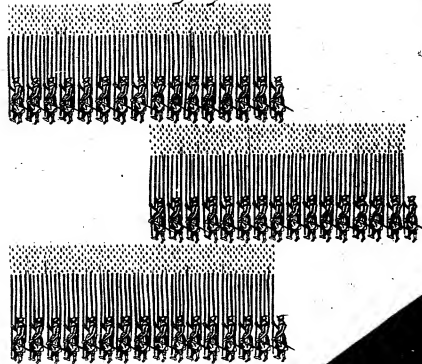
Of the foot-Bataile called *Placium*, and of the win-
ding, or saw-fronted foot-bataile to
encounter it.

CHAP. XLIX.

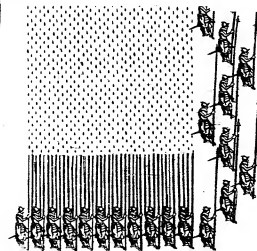
THE Bataile *Placium* hath the length much exceeding the depth. And it is called *Placium*, when armed foote are placed on all sides, the Archers, and Slingers, being throwne into the midst. Against this kinde of Bataile is set the winding-fronted-bataile, to the end that with the vnequall figure, they may

The *Cyrtte* or conuex halfe Name

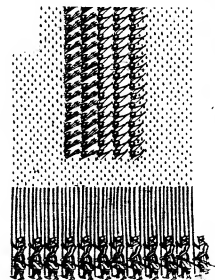
Cap. 47.

The *Epicampios*

The front



The front



* The counter-bataile.

THe Battail cumscripte the counter-bataile yer stretched out to be: as is ea the one halfe, an The greatest the enemy, and i

* Four square.

THe * *Tetrag* For in *Squa* advantage maye of the *Grecians* de ter in vs.

* Wedge.

Against it is op sides consisting of armed men. And yet in the Horse-wedge, one sufficeth to lead in front, where the Foote-wedge must haue three, one being vnable to beare the sway of the encounter. So *Epaminondas* the *Theban* fighting with the *Lacedemonians* at *Mantinee*, overthrew a mightie power of theirs by casting his armie into a *Wedge*. It is fashioned if the *Antistomus* *Diphalangy* in marching ioyne the front of the *wings* together, holding them open behind like vnto the letter *A*.

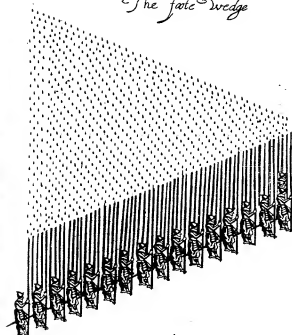
Of the foot-Bataile called Plesium, and of the winding, or saw-fronted foot-bataile to encounter it.

CHAP. XLIX.

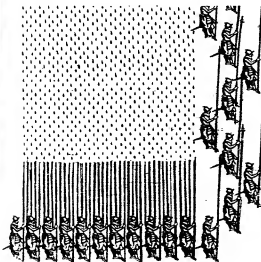
THe Bataile *Plesium* hath the *length* much exceeding the *depth*. And it is called *Plesium*, when armed foote are placed on all sides, the *Archers*, and *Slingers*, being throwne into the middest. Against this kinde of Bataile is set the *winding-fronted-bataile*, to the end that with the *vnequall figure*, they may traine

Cap. 48.

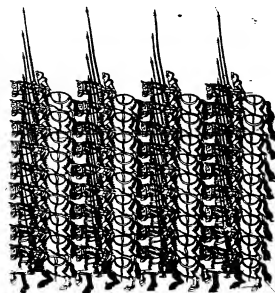
The saw wedge



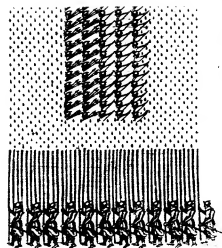
The front



The Horse-bataile square in figure, not in horse



The front



* The convex
battale.

THe Battale
cumbe
the convexi
yet stretche
red to be: as
the one half
The grea
the enemy, :

* Four-square.

THe * T.
For in
advantage
of the *Gracia*
ter in vfe.

* Wedge.

Against it
sides confist
And yet in the
wedge must

So Epaminondas the Theban fighting with the Lacedemonians at Mantinea, over-
threw a mightie power of theirs by casting his armie into a *Wedge*. It is fashioned
if the *Antistomis* *Diphalangy* in marching ioyne the front of the *wings* together,
holding them open behind like vnto the letter Δ .

*Of the foot-Battale called Plesium, and of the win-
ding, or saw-fronted battale, to
encounter it.*

CHAP. XLIX.

THe Battale *Plesium* hath the *length* much exceeding the *depth*. And it is
called *Plesium*, when armed foote are placed on all sides, the Archers, and
Slingers, being throwne into the middest. Against this kinde of Battale is set
the *winding-fronted battale*, to the end that with the *unequall figure*, they may
traîne

Cap. 50.

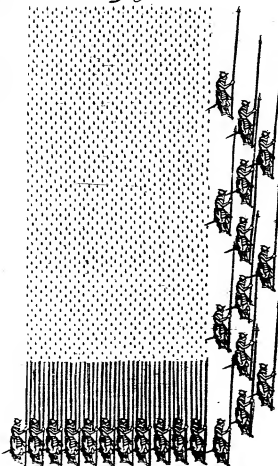
The adversie battale

The overfrowning battale

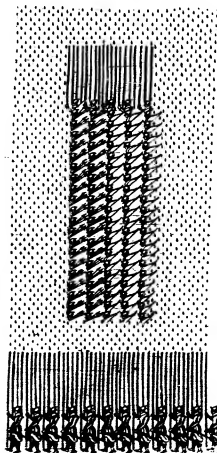


Cap. 49.

The Poplemene



The Plesium



The front

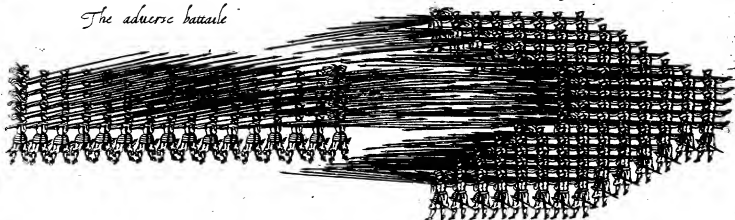
* The convex-
bataile.

THe Bataille
the convex
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red to be : as
the one half

Cap. 50.

The adverser bataile

The overfronting bataile



Of conveying the Carriage of the Army.

CHAP. LI.

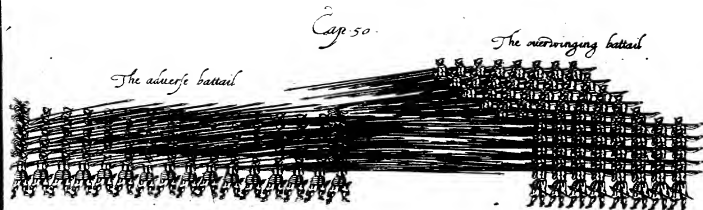
THe leading of the carriage, if any thing else, is of great importance, and requireth a speciall Commander. It may bee conveyed in five manners, either before the Armeie, or behinde, or on the one flanke, or the other, or in the midst.

Before the Army, when you feare to bee charged behind. Behind the Army, when you would leade toward the enemy. When you feare to bee charged in flanke on the contrary side. In the midst, when a *hollow-Bataile* is needfull and fit.

Of the words of Command, and certaine observations about them.

CHAP. LII.

Aft of all wee will briefly repeate the words of direction, if we admonish, first that they ought to be short, then that they ought to be without *double-signification*. For the Souldiers, that in haste receive direction, had neede to take heede of doubtfull words, least one doe one thing, and another the contrarie. As for the



THE ADUERGE'S BATTAIL. THE RETURNING BATTAIL.

Of conveying the Carriage of the Army.

CHAP. LI.

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Before the Army, when you feare to bee charged behind. Behind the Army, when you would leade toward the enemy. When you feare to bee charged in flanke on the contrary side. In the middest, when a *hollow-Battaille* is needfull and fit.

Of the words of Command, and certaine observations about them.

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traîne out those of the *Plafsum* to cope with the foremost of the *winding-fronted-battle*, and by that means dissolve, and disorder the thickesse of the same. And the file-Leaders of the *winding-battle* are to observe, and make the file-Leaders of the *Plafsum*, that if they still maintaine their closesse, and fight ferred, they also encounter them in the like forme; if the *Plafsum* file-Leaders sever themselves, and spring out from their maine force, then they likewise bee ready, to meet them man to man.

Of Hyperphalangeis; and Hyperkerasis; and of Attenuation.

CHAP. L.

Hyperphalangeis, or *over-fronting* is, when both *wings* of the *Phalange* overreach the enemies front. *Hyperkerasis*, or *overwinging* is, when with one of the *wings* we overreach the front of the enemy. So that hee, that *overfronteth*, *overwingeth*, but hee, that *overwingeth*, *overfronteth* not. For they, that match not the enemy in multitude, may yet *overwing* them. *Attenuation* or lessening is, when the depth of the battaile is gathered up; and in stead of 16 men a smaller number is set.

Of conveying the Carriage of the Army.

CHAP. LI.

The leading of the carriage, if any thing else, is of great importance, and requieth a speciall Commander. It may bee conveyed in five manners, either before the Armie, or behinde, or on the one flanke, or the other, or in the midst.

Before the Army, when you feare to bee charged behind. Behind the Army, when you would leade toward the enemy. When you feare to bee charged in flanke on the contrary side. In the midst, when a *hollow-Battaile* is needfull and fit.

Of the words of Command, and certaine observations about them.

CHAP. LII.

Last of all wee will briefly repeate the words of direction, if we admoone first that they ought to be short, then that they ought to be without *double-signification*. For the Souldiers, that in haste receive direction, had neede to take heede of doubtfull words, least one doe one thing, and another the contrarie. As for the

The Taſticks

purpose: If I ſay *turne your face*, ſome it may be, that heare mee, will turne to the right, ſome to the left hand, and ſo no ſmall conſuſion follow. Seeing therefore theſe words *turne your face* import a generall ſignification, and comprehend *turning to the right, or left hand*, we ought in ſtead of ſaying *turne your face to the pike*, to pronounce it thus: *To your Pike turne your face*, that is, we ought to ſet the particular before, and then inferre the generall. Like reaſon is, if you ſay, *turne about your face*, or *countermarch*. For theſe are alſo generall words; And therefore wee ſhould do well to ſet the particular before. As to the *Pike turne your face about*, or to the *Target turne your face about*. Likewise the *Lacedemonian countermarch*, not the *Counter march Lacedemonian*. For if you place the word *Countermarch* firſt, ſome of the Souldiers will happily fall to one kinde, other to another kinde of *Countermarch*. For which cauſe words of double ſenſe are to be avoided, and the ſpeciall to be ſet before the generall.

Of ſilence to be uſed by Souldiers.

CHAP. LIII.

BUt above all things ſilence is to bee commanded, and that heed be given to directions: As *Homer* ſpecially ſignifieth in his diſcriptions of the *Graecian* and *Troian* fights.

*The ſkilfull Chieftaines preſſed on, guiding with careful eie
Their Armed ſroupes, who followed their Leaders ſilently,
You ſurely would have deem'd, each one of all that mighty throng
Had beene bereft of ſpeech, ſo bridled he his beedfull tongue,
Fearing the dread Commander checke, and awful boſt ſounding.
Thus march'd the Greekes in ſilence, breathing flames of high deſire,
And fervent zeale, to backe their friends, on foes to wreake their ire.*

As for the diſorder of the *Barbarians* he reſembleth it to birdes ſaying.

*As ſhoales of ſwale, geefe, cranes, and ſwannes with necks far ſtretched out,
Which in the ſlony ſennes Caſters winding ſtreames about
Shew here, and there, the liquid ſkie, ſporting on winton wing.
Then fall to ground with clanging noiſe, the ſennes all ouer ring:
None otherwiſe the Troians fill the field with heaped ſounds
Of broken, and conſuſed cries, each where tumult abounds.*

And againe:

*The Captaines marſhall out their Troupes ranged in goodly guiſe;
And forth the Troians pace like birds, which lade the aire with cries.
Not ſo the Greekes, whoſe ſilence breathed flames of high deſire,
Fervent in zeale to backe their friends, on foes to wreake their ire.*

CHAP.

of Ælian.

The words of Command.

CHAP. LIIII.

Thus then are we to command.

- T**O your Armes.
Stand by your Armes.
Carriage away from the battaile.
Marke your directions.
Seperate your ſelves.
Advance your Pikes.
File and ranke your ſelves.
Looke to your Leader.
Reare Commander order your file.
a Keepe your firſt diſtances.
b Faces to the Pike, moue a little further, ſtand ſo, as you were.
b Faces to the Target, moue a little further, ſtand ſo.
b Faces about to the Pike, moue a little further, ſtand ſo.
c Double your Depth. To your firſt poſture.
c Double your Length. To your firſt poſture.
d The Lacedemonian countermarch. To your firſt poſture.
d The Macedonian countermarch. To your firſt poſture.
d The Choraan countermarch. To your firſt poſture.
e Battaile wheele to the Pike. To your firſt poſture.
e Battaile wheele about to the Pike. To your firſt poſture.

a Before cap. 110.

b Before cap. 109.

c Before cap. 109.

d Before cap. 108.

e Before cap. 108.

Theſe precepts of the Art Taſticke (moſt inuincible *Cæſar*) I have laide out to your Ma^{ties}, which will be a meanes of ſafety to ſuch, as ſhall vie them, and of the ouerthrow of their enemies.

℞ 4

Tbe



THE EXERCISE OF THE ENGLISH IN

the seruice of the high and mighty Lords,
the LORDS the ESTATES of the vni-
ted PROVINCES in the Low
COUNTRIES.



HE Soldiers are diuided into two kinds, *Foot* and *Horse*. The *Foot* againe are of two kinds; *Pikemen* and *Musketers*.

Pikemen are armed with a head-peece, a Curace and Tasse defensive, and with a Pike of fiftene foote long, and a Rapier offensive. The Armour is all yron; the Pike of Ashen wood for the Steele, and at the vpper end an yron head of about a handfull long with cheekes about the length of two foote, and

at the butt-end a round strong socket of yron ending in a pike, that is blunt, yet sharpe enough to fixe to the ground. The forme thereof is expressed in the grauen figure.

The *Musketer* hath a head-peece for defence, a *Musket*, the barrell of the length of 4 foote, the bore of 12 bullets to the pound; a Bandler, to which are fastned a convenient number of charges for powder (sometimes as many as 15 or 16) a leather bagge for bullets, with a pruning yron; a Rest for the *Musket* with an yron forke on the vpper end to support it in discharging, and a pike on the nether end to sticke into the ground; lastly, a Rapier. The figure of this armour also is here inserted.

These soldiors, both Pike-men, and Musketers, are diuided into Companies; and every Company consisteth, halfe of Pikes, halfe Musketers. The Companies are some more in number, some lesse. Some reach to 300 men, some 200, some 100, some 90, some 80, some 70. Every Company hath these officers of the field: A Captaine, a Lieutenant, an Ensigne, 2 Sericants, 3 Corporalls, two Drummes; and for other vses a Clerke, a Surgion, and a Prouost.

Companies are compacted into Regiments; and the Regiments commanded by Coronells. Regiments containe not alwaies a like number of Companies, some hauing 10, some 11, 12, 13, 14, 15, some 20 Companies and aboue. In every Regiment are a Coronell, a Lieutenant Coronell, a Sericant Major, all officers of the field; a Quarter-master, and a Prouost-martiall for other employments. It shall not be greatly to the purpose to mention higher officers, then Coronells, my principall intent being no other, then to set downe the armes and exercise of our Nation in the said vnitd Provinces. Their names are spoken of. Their exercise followes.

The

The Exercise of a foote Companie.

First both Pikes and Muskets are ordered into files of 10 deepe. The Muskettiers are sometime placed before, sometime in flanke, sometimes in the reare of the pikes.

To exercise the motions, there are two distances to be observed.

The first is when every one is distant from his fellow 6 foote square, that is in file and ranke 6.

The second is when every Souldier is 3 foote distant one from the other as well in file, as in Ranke.

And because the measure of such distances cannot be taken so iustly by the eye, the distance of 6 foot betwixt the files is measured, when the Souldiers stretching out their armes doe touch one an others hands: and betwixt the Ranks, when the ends of their pikes come well nigh to the heeles of them, that march before. And the measure of 3 foote betwixt the files is, when their elbowes touch one another; betwixt the ranks, when they come to touch the ends of one anothers Rapiers.

For to march in the field, the distance of 3 foote from file to file is kept, and of 6 foote from Ranke to Ranke.

To order themselves in Battaile, as also to goe towards the enemy, the distance of 3 foote in file, and ranke, is observed; and likewise to conversion or wheeling.

The Musquettiers also going for to shoote by Ranks keep the same distance of 3 foot, but going to skirmish they goe *ala Disbandade*, which is out of order.

There is yet another sort of distance, which is not vled, but for to receive the enemy with a firme stand, and seruet for the pikes onely (for the Musquettiers cannot be so close in files, because they must haue their Armes at liberty) & that is, when every one is distant from file to file a foote and a halfe, and 3 foote from Ranke to Ranke. And this last distance is thus commanded, *Close your selves thoroughly*. But it is not to be taught the Souldiers, for that, when necessitie shall require it, they will close themselves but too much, of their owne accord without command.

To begin therefore to doe the exercises, the Company is set in the first distance, to wit of 6 foote in file, and ranke, and thus is said

Stand right in your files.

Stand right in your ranks.

Silence.

To the right hand.

As you were.

To the left hand.

As you were.

To the right hand about.

To the left hand as you were.

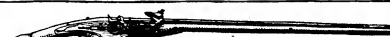
To the left hand about.

To the right hand as you were.

These are the generall words of Command which are often to be vied.

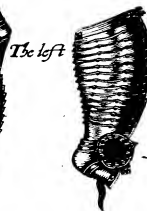
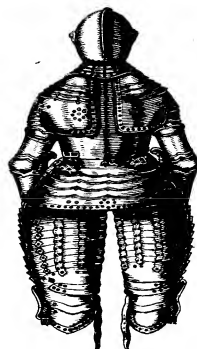
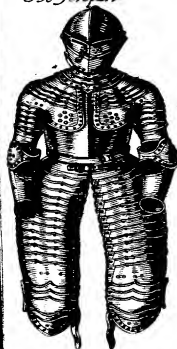
You must note, that when they are commanded to be as they were, they must returne shifter, from whence they parted; and if they turned to the right hand, they must returne to the left, and so in counter-march.

To



The forepart

The backe



The left



The left

The guard

Charge

The Exercise of a foote Compaignie.

First both Pikes and Muskets are ordered into files of 10 deepe. The Musketers are sometime placed before, sometime in flanke, sometimes in the reare of the pikes.

To exercise the motions, there are two distances to be obserued.

The first is when every one is distant from his tellow 6 footes square, that is in file and

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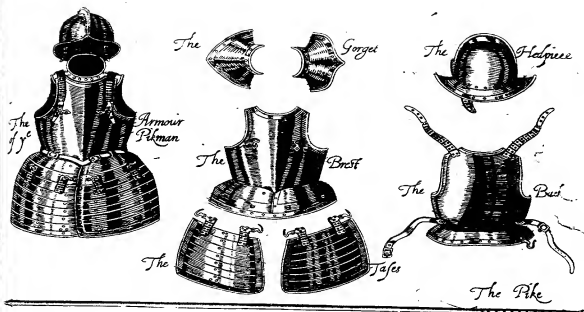
To the
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When the pike is in the ground

To the right hand wheele.

To the left hand wheele.

Open your Ranks backwards in your double distance to wit at 12 footes, and this for a single Company.

Ranks as you were, &c. at the first.

In opening Ranks or Files, you must keepe them close vntill the second Ranke or File beginning from the outsid es haue taken their distances, and so shall the rest remaine close vntill euery Ranke or File haue taken their distances in order.

Open your files, to wit to the first distance of 6 footes.

If you will command to close files to the right hand or left hand, the outmost file standeth still, and the rest close to that file.

For the Pike with a firme stand.

Advance your Pikes.

Order your Pikes.

Slope your Pikes.

Charge

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To the right double your ranks.
Ranks as you were.

To the left hand double your ranks.
Ranks as you were.

To the right hand double your files.
Files as you were.

To the left hand double your files.
Files as you were.

With halfe files to the right hand double your Ranks.
Halfe files as you were.

With halfe files to the left hand double your Ranks.
Halfe files as you were.

Files to the right hand countermarch.
Files to the left hand countermarch.

To the right hand or left at discretion as you were.

Ranks to the right hand countermarch.
Ranks to the left hand countermarch.

To the right or left hand as you were.

Close your Files 2
Close your Ranks 5 to 3 foote distance.

Understand that in Closing from the outfiles to the middle the Soldier is to stand in his distance of 3 foote in file, and not closer.

To the right hand wheele.
To the left hand wheele.

Open your Ranks backwards in your double distance to wit at 12 foote, and this for a single Company.

Ranks as you were, &c. at the first.

In opening Ranks or Files, you must keepe them closed untill the second Ranks or File beginning from the outfiles have taken their distances, and so shall the rest remaine close untill every Ranks or File have taken their distances in order.

Open your files, to wit to the first distance of 6 foote.

If you will command to close files to the right hand or left hand, the outmost file handeth still, and the rest close to that file.

For the Pike with a firme stand.

Advance your Pikes.
Order your Pikes.
Slope your Pikes.

Charge

Charge your Pikes.
Order your Pikes.
Traile your Pikes.
Cheecke your Pikes.

More for the Pikes first with a firme stand and then marching.

Charge your Pikes.
Slope your Pikes.
To the right hand charge your Pikes.
Slope your Pikes.
To the left hand charge your Pikes.
Slope your Pikes.
Charge your Pikes to the Reare.
Slope your Pikes.
Order your Pikes.

This must be observed charging your Pikes with a firme stand to set the right foot behind, and charging the Pikes marching to set the left foot before.

For the Muskets.

The Postures in his Excellencies Booke are to be observed; but in exercising you must onely vse these three termes of direction.

Make ready.

Present.

Give fire.

Your Muskettiers must observe in all their motions to turne to the right hand, and that they carry the mouth of their peeces high, aswell when they are shouldred, as in pruning, and also when they hold their pannes garded, and come vp to give fire.

The enemy before the Vanguard. In advancing towards an Enemy, when they doe not skirmish loose and disbanded, they must give fire by Ranks after this manner.

Advancing. Two Ranks must alwaies make ready together, and advance ten paces forward before the body, at which distance, a Sergeant (or when the body is great some other officer) must stand, to whom the Muskettiers are to come vp before they present, and give fire, first the first rank. And whilest the first gives fire, the second Rank keep their Muskets close to their Rets, and their pannes garded, and assoone, as the first are fallen away, the second presently present, and give fire, and fall after them.

Now assoone as the first two Ranks doe move from their places in the front: The two Ranks next them must vnshoulder their Muskets, and make ready, so as they may advance forward ten paces as before assoone as ever the two first ranks are fallen away; and are to doe in all points as the former. And all the other Ranks through the whole division must doe the same by twos, one after another.

A manner

A manner there is to give fire retyring from an Enemy, which is performed after this sort.

As the Troope marcheth the hindermost ranke of all keeping still with the Troope is to makeready, and being ready, the fouldiers in that ranke turne also together to the right hand and give fire, marching presently away a good round pace to the front, and there place themselves in ranke together just before the front: As soone as the first ranke turne to give fire, the ranke next makes ready, and doth as the former, and so the rest.

We give fire by the flanks thus. The vppermost file next the Enemy must be commanded to make ready, keeping still along with the body, till such time, as they be ready, and then they turne to the right, or left hand (according to the sight of their enemies either vpon the right, or left flank) and give fire altogether. When they have discharged they stirre not, but keepe their ground, and charge their Peeces againe in the same place, they stand. Now as soone as the forelaid file doth turne to give fire, the vtermost next it makes ready alwaies keeping along with the Troope till the Bringer-up be past a little beyond the Leader of that file, that gaue fire last; and then the whole file must turne, and give fire, and doe in all points as the first did, and so the rest one after the other. A Sergeant, or if the Troope be great some other better qualified Officer must stand at the head of the first file, and assoone as the second hath given fire, and hath charged, he is to lead forward the first file vp to the second file, and so to the rest one after another, till he hath gathered vp againe the whole wing, and then he is to ioyne them againe in equall front with the pikes.

Last of all the Troope or whole wing of Muskettiers makes ready altogether, and the first ranke without advancing gives fire in the place they stand in; and speedily as may be, yet orderly falls away, all the ranks doing the same successively one after another.

Thus much of the armes and exercise of the foote.

The horse ensue.

The order and discipline holden in Horse-troopes, or in the Cavalry.

THIS Cavalry hath for his Chiefe the Generall, the Lieutenant Generall, and the Comissary generall.

To the Cavalry there is a Quarter-master generall, and a Provost generall belonging; the Iustice reformeth to the Councell generall of warre of the Army.

The Cavalry is of two sorts. *Harquebushers, and Curasiers.*

The first haue for defensie armes, the Curace pistoll prooffe, and a light head peecce. For offensie the Curace of 3 foote, 3 inches length, and the bore of 20 bullets in the pound, and Pistolls like vnto the Curasiers.

The Curasiers haue for defensie Armes a compleat armour, the Curace pistoll prooffe. For offensie two pistolls hauing the barrell of 26 inches in length, and the bore of 35 bullets in the pound. See the figure of Armes.

For the order in Regiments the 40 Companies entertained by the States doe make cleven Regiments.

The Regiment of the Generall hath alwaies the Vanguard, the others afterwards.

natiuely and by turnes, and he that hath it this day, the next day after hath the Reare, the rest following in the same sort.

Those which command the Regiments are called *Coronells*. The Regiments are compounded of 3, or 4 Companies (of 3, at the least) and the Coronells Company marcheth alwaies on the left wing of the Regiment.

The Capitaines receive orders from their Coronells, as these from the Com-military Generall.

All the Companies are diuided in 3 equal parts, which are called Squadrons, and distributed to the three chiefe officers; Capitaine, Cornett, and Lieutenant, hauing each of them adioyned an old Souldier, which they doe know to bee of more desert, called a Corporall.

Marching in the field, euery Officer marcheth at the head of his Squadron, the Lieutenant excepted, which marcheth behind with the Quartermaster; and the third Corporall at the head of the Lieutenants Squadron.

The Companies are diuided by files, and rankes, the file 5 deepe, and no more, how strong soeuer the Company be.

They obserue that in marching in battaile they must be close together, and to doe the *Motions* there must be 6 foote distance from one Horseman to another.

The Companies being in battaile, there must be 25 paces distance left between euery Company, and 50 betwixt euery Regiment at the least.

The exercise of Armes for the Cavalry.

To open the Squadron you must first open the rankes and after the files.

To close the Squadron, you must first close the files, and after the rankes.

There be two sorts of distances betwixt the files, the one close, and the other open.

In the Close there must be no distance or intervalls betwixt the files, to the open there must be 6 foote betwixt euery file.

Likewise there must be two sorts of distances betwixt the rankes; the Close, which must be without intervall or streete, and the Open, which must be six foote distance.

In a march it must be vnderstood, that the rankes must neuer be more opened, then the open distance of 6 foote.

And to the end that the Troop may march in good order, and obserue well their distance betwixt the rankes, without that the last may be forced to runne or goe to fast, there must be heed taken, that so soone, as the first rankes begin to march, all the Troop, and the Reare also at one time march.

The words of Command are

Open your Rankes.

Open your files.

Stand right in your rankes.

Stand right in your files.

To the right hand.

As you were.

To

To the left hand.

As you were.

To the right hand about.

To the left hand as you were.

To the left hand about.

To the right hand as you were.

Files to the right hand countermarch.

Files to the left hand countermarch.

To the right or left hand as you were.

Rankes to the right hand countermarch.

Rankes to the left hand countermarch.

Close your files.

Close your rankes.

To the right hand wheele.

To the left hand wheele.



Files

[illegible]

OF *Armes in generall.*
Defensue armes of old time.
Offensue armes.
Strength of armes; therein of the matter.
Fittnesse for the *Body.*
Field.

Three kinds of Footmen.
1. *Armes of the armed.*
The forme of the Macedonian Target.
The matter.
The Macedonian Pike.
The wood it was made of.
Target and Pike both vied together.
How the Target was carried.
2. *The light-armed and their appellations.*
1. *Arrowes and the Nations that were Archers.*
The estimation of Archers of ancient time.
That good service might be done from our bowes even at this day.
2. *Dartes, and the divers names given them.*
The matter, fashion, and force of Dartis.
3. *Slingers.*
The best slingers.
How farre a sling will reach.
3. *Targeters.*
The forme of their Targets.
Their Pike.
Their other armes.
The Hypaspists in the Historie of Alexander.
Horsemen.
Cataphractes.
Their, and their horses armor.

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